JUN 15 1920

Registered at the G.P.O., Sydney, for Transmission by Post as a Newspaper. Published Weekly.

THE

MEDICAL JOURNAL OF AUSTRALIA

(With which "The Australasian Medical Gazette," and "The Australian Medical Journal" are incorporated.)

The Journal of the Australian Branches of the British Medical Association

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THE MEDICAL JOURNAL OF AUSTRALIA.

VOL. I.—7TH YEAR. SYDNEY: SATURDAY, MAY 1, 1920. No. 18.

THE CONSERVATIVE TREATMENT OF ECLAMPSIA.[1]

By R. Marshall Allan, M.D., F.R.C.S.E.,
Brisbane.

The correct treatment of eclampsia is still a subject of contention. The English, continental and many of the American authorities are in favour of active measures in contradistinction to the conservative methods upheld by Stroganov and the Rotunda Hospital. This is the so-called morphine method, but we differ from Stroganov in not using chloral and bromides and by placing greater faith in very thorough lavage of the intestinal tract. For the past twenty years this method has been elaborated, but the principles remain the same. The value of any deductions from the results I propose to bring before you depends largely on the continuity of the same kind of treatment over a sufficiently long period. In a small series there is room for doubt that only slight cases were treated, but here every variety has been included.

During my period of office as Assistant Master to Dr. Henry Jellett many of the cases were under my own care, the remainder have been abstracted from the annual reports of Tweedy and Jellett.

Before detailing the methods adopted, I wish to analyse this series and show how they support or vary from current text book description.

Causation.

There are many theories as to the causation of eclampsia. The Dublin method of treatment is based on the toxæmic one. We are indebted to Tweedy for the elaboration of this theory. According to him eclampsia arises from an overwhelming of the blood food ferments (antibodies) by toxins from the maternal intestinal tract and from the ovum. These antibodies are developed shortly after birth in response to an antigen present in the colostrum. During pregnancy fragments of syncytium and doubtless other substances derived from the ovum enter the maternal blood and are there digested by the antibodies. The latter are not always present in sufficient amount to assimulate foreign protein from both ovum and intestinal tract, though competent to deal with either alone. Even if they can deal with both, an increase of food taken by the mother or of proteins from the ovum may upset the balance and bring about the condition termed eclampsia. Milk diet will reduce them in amount, starvation is still better and probably will cause a complete cure. The good effects of active measures of treatment are due largely to the associated limitation of food and, unless this be done, no better results will be obtained.

While this theory may be difficult to prove theoretically, there is no doubt about its practical value.

Incidence.

Eclampsia seems to occur in epidemics. Months would pass without a case, and then be followed by a rush. Frequently this took place in cold, damp weather, and may be explained by the increased appetite due to climatic changes. Or again it may be caused by intestinal irritation from the ingestion of large amounts of raw or semi-raw vegetables, especially at the end of the season, when they are old and tough. Further reference to this will be made later on.

Relation to Parity.

In my series there were 94 cases, 64 in primiparæ and 30 in multiparæ. The proportion of the latter is higher than usually stated. The majority of the women were between twenty and twenty-five. Twins were noted in 8 cases, or 8.5% (the usual ratio to single births being 1.5%). No cases of hydramnios were observed.

Fits.

These occurred as follows: *Ante partum* 34, *intra partum* 11, *post partum* 28 and mixed 21. Six patients who had fits during the *ante partum* period, died, and two who had fits during the *post partum* period. The relative frequency of the *post partum* group calls for further comment. They occurred in 30% of the cases with a mortality of 7%. Williams gives an incidence of 23% with a 25%-27% mortality, while De Lee also states these patients have the worst prognosis. Our experience has been more fortunate.

Prognosis.

This is notoriously hard to predict. Death may occur after few fits or recovery after many. Undoubtedly the gravity increases with each fit up to twenty or thirty. A greater number does not add to it, as this depends more on the rapidity and duration of the coma after each attack. The following symptoms are bad signs:—A temperature above 39.4° C., or a subnormal temperature, a weak, thready, rapid pulse, especially if associated with high temperature, œdema of the lungs, particularly if pale cyanosis be present between the fits, inability to sweat in a pack, anuria or hæmoglobinuria, jaundice. Antecedent renal disease makes the prognosis in multiparæ much worse. In the vast majority of cases the albuminuria clears up within the first three days after delivery.

Mental derangement, varying from dulness to violent mania, was noted in four cases. All the patients recovered during the puerperium.

Causes of Death.

An analysis of the fatal cases shows that the majority of deaths were due to exhaustion, œdema of the lungs and heart failure. High temperatures, cyanosis and jaundice were also noted. One patient had almost complete anuria, while another died from hæmorrhage due to a ruptured mesenteric vein.

Maternal Mortality.

The figures bear out the statement of Edgar that 8%-10% die no matter what treatment be adopted, while the rest recover by conservative measures. Eighty-six mothers recovered and eight died—a mortality of 8.5%. Of these two were primiparæ and six multiparæ. Many of the latter had old renal disease. These results are the best next to those of Stroganov, who had 839 cases with a mortality of 5.31%. The

[1] Read at a meeting of the Queensland Branch of the British Medical Association on April 9, 1920.

average mortality is stated to be 20%-25%. The best figures of the active school are those of Zweifel, whose mortality was 11.25%. Even an ardent supporter of early Cæsarean section cannot produce a lower rate than 14% in 72 cases. This very satisfactory result has only been obtained gradually. When the morphine treatment was reintroduced by Smyly at the Rotunda Hospital the mortality was 35%.

Fœtal Mortality.

This must always remain very high, due to the prematurity of so many of the infants. Prematurity and toxæmia will react against any measure of treatment, active or conservative. The average mortality is stated to be 30%-50%. In my series 102 children were born, 60 alive and 42 dead. Of the latter 19 were premature or macerated, leaving 23 full-term, still-born children. The total mortality was 41%, but, if those who would not have lived in any case, be deducted, it is only 22%.

The causes of death, apart from those already mentioned, are asphyxiation from fits or drugs given to the mother and birth injuries due to *accouchement forcé*.

Two children died shortly after birth from fits, and one was born in a condition of "morphine sleep," but afterwards recovered.

Principles of Treatment.

No one form of treatment can be uniformly successful. Some patients, even when seen early and presenting a satisfactory urinary secretion, have no more fits and yet they sink into coma and die despite any treatment. Others, though deeply comatose when treatment is commenced, react at once and recover.

The principles of our method may be summarized as follows:—

I.—Delivery as Soon as Possible.

Prolonged labour is bad for the mother. The child need not be considered as in so many cases it is premature. Labour is never induced in the Dublin method. We are content to wait the onset of labour, while dealing with the fits in other ways. But if labour has commenced, the patient is not allowed to go on indefinitely. As soon as the *os* is fully dilated, forceps are applied or the breech extracted. Seventy-eight mothers were delivered naturally and sixteen had instrumental aid. Vaginal examinations are strictly limited owing to the special risk of sepsis associated with this condition. Pituitary extract is never employed because of its effect on the blood pressure.

II.—Restriction of Further Metabolism.

(*a*) By starvation. This is most important in view of the theory advocated by Tweedy. During the war it was noted in Germany that eclampsia was the only disease which had become rarer, due to the semi-starvation diet. Intestinal irritation is closely connected with the onset of convulsions. The following case will illustrate the undoubted association between the ingestion of food and the occurrence of fits. A.R. had four *ante partum* fits. Sixty-nine hours after delivery she was given some milk; three fits at once occurred. The usual treatment was adopted. Thirty-three hours later, following a drink of whey, further fits took place. A similar occurrence was noted in two other cases.

(*b*) By morphine. This controls the fits and decreases metabolism and cerebral irritation. It does not act as a cardiac depressant unlike other sedatives, nor does it suppress the urinary secretion. The toxins in the blood have already caused spasm of the renal arterioles.

(*c*) By gastric lavage. Very great importance is attached to this for the removal of fermenting food. Many of the patients had a history of bolting a large meal prior to the onset of fits. Very frequently gastric lavage removed quantities of undigested and indigestible material of a vegetable nature, such as potato peelings, raw cabbage, currants and orange pulp.

III.—Eliminatory Treatment.

(*a*) Rectal lavage. The thorough and rapid evacuation of the bowels is probably the most important part of the treatment. We were never satisfied until the bowels were moved from four to six times in the twenty-four hours.

(*b*) Sweating. This was done with a pack, though an electric cradle would probably have been a better means of treatment. Pilocarpine was not employed because of the risk of œdema of the lungs.

(*c*) Urinary secretion. Copious draughts of water are given as well as poultices to the loins, renewed at frequent intervals. In severe cases sub-mammary infusion of bicarbonate of soda solution was employed; occasionally this was administered intravenously. Hypodermic injections of digitalin were also used.

(*d*) Venesection. This was not extensively performed. While a certain amount of toxin is removed, it causes cardiac depression and concentrates the remainder of the toxin. There is a sudden fall of blood pressure accompanied by shock and anæmia, which is not only cerebral but also general.

IV.—Treatment of Special Symptoms.

(*a*) Fits. Morphine is the best drug to control these. Chloral is not used as it is a cardiac depressant, but it forms part of Stroganov's treatment. A general anæsthetic is only administered while the stomach and rectum are being washed out, to obviate any stimulation of the patient during these manipulative procedures. We still use chloroform for this purpose, though recognizing that for continuous use it is not suitable; because it predisposes or causes hepatic necrosis. None of the other remedies often suggested were employed, such as *veratrum viride*, thyroid extract, bromides, hirudin or renal decapsulation. Lumbar puncture was performed on one occasion with no result.

(*b*) Cardiac weakness is treated with digitalin and alcohol.

(*c*) Respiratory symptoms. To prevent the slowing of the respiration due to morphine, atropine may be given occasionally in conjunction with the former drug. Oxygen should always be kept at hand and the nurse instructed to apply artificial respiration should the need arise.

Treatment if Individual Case.

This entails a rigid adherence to many points of detail. The responsibility of the case should not be handed over entirely to the nurse. A marked improvement in our results occurred when a resident, in addition to the nurse, was continually in attendance on the case. One must be certain that the nurse

knows how to apply artificial respiration in case of sudden respiratory difficulty. The patient should be placed in a dark room away from all noises. She must be kept on her side, if unconscious, to prevent fluids formed in the mouth passing to the lungs by inspiration and so causing the pulmonary œdema, which marks the end of many patients. For the same reason no fluids are permitted to be given by mouth to an unconscious patient. If the patient be conscious, a catheter specimen is obtained and examined while the blood pressure is taken. Morphine (0.03 grm.) is given hypodermically and repeated in 15 mgr. doses every two hours if the fits continue. In the majority of cases the total amount given in twenty-four hours should not exceed 0.06 grm.; but severe cases may require up to 0.12 gramme. This maximum must not be exceeded. Atropine (0.0006 grm.) may be added to the morphine to prevent excessive slowing of the respiration. The stomach is not washed out, but a large dose of purgative given, such as *mist. sennæ co.* 90 c.cm., *ol. ricini* 60 c.cm., or *pulv. jalap. co.* 5.8 grammes. Water in abundance is given to drink and, if necessary, poultices applied to the loins, or the patient is placed in a pack.

If she be unconscious or rapidly becoming so, after obtaining a catheter specimen, the mouth is gagged and the stomach washed out under an anæsthetic. Sodium bicarbonate solution, one part in 80, is used and the lavage continued until the return flow is quite clear. A small amount is left *in situ* with the addition of 90 to 120 c.cm. of *mist sennæ co.* If *ol. ricini* be used, much of the oil sticks to the tube; and to insure that it all passes into the stomach, the tube should be squeezed between the fingers as it is withdrawn. The rectum is washed out with the same solution until the return flow is well stained with fæces and a similar amount of purgative is left in the bowel. Unless a decided improvement occurs in four to six hours, the lavage is repeated. The patient is kept on her right side until conscious. Occasionally she may be turned on her left side, though this may cause some pressure on the heart due to a full stomach, especially if too much fluid has been left after the lavage. Poultices are applied to the loins at frequent intervals. In severe cases the pack is used and in addition submammary infusions of bicarbonate of soda solution. Half a litre is given under each breast at intervals of eight to ten hours. In the worst cases it may also be administered intravenously. The catheter is passed at regular intervals and the amount withdrawn, measured and noted. The pulse should be taken hourly. Digitalin is given in 0.0006 to 0.0012 grm. doses if the heart be failing. Careful watch must be made to detect any signs of the onset of labour. A proper gag, or one improvised from a handle of a spoon wrapped in rag must be kept ready for instant use whenever a fit occurs. On the least sign of respiratory difficulty the patient should be turned on her chest and her head hung well over the edge of the bed. For this purpose, if she be grasped by her hair, a good control of the head can be obtained. It is surprising how frequently recovery occurs with this simple procedure, after the mucus has poured out of the nose and mouth. If the pulse or respirations cease, oxygen should be administered and artificial respiration carried on without any delay.

During convalescence it is of the utmost importance that the patient be kept on a very low diet. Water only is allowed for at least three days. Then albumen-water is added followed by whey and finally dilute milk and water.

No indications for operative interference have been mentioned. These methods, if carefully followed, give better results and are more adapted for use in private practice. The majority of cases seem to end in labour, so a more conservative attitude should be maintained in view of the results attained by the Rotunda School.

RODENT ULCERS AND ALLIED GROWTHS.

An Analysis of Sixty Australian Cases.

By **J. Burton Cleland, M.D.,**
Professor of Pathology, University of Adelaide; Formerly Principal Microbiologist, Department of Public Health, Sydney;
and
Norman Paul, M.B., Ch.M.,
Honorary Dermatologist, Royal Alexandra Hospital for Children; Honorary Assistant Dermatologist, Sydney Hospital.

A number of new growths of the skin, either definite rodent ulcers, or resembling these more or less closely, having been submitted to us for microscopical examination, it seems advisable to place on record our finding, more particularly with regard to the various classifications of these neoplasms. The experience of one of us is that rodent ulcers are much more prevalent in Australia, certainly in New South Wales, than they are in Great Britain.

The series here reviewed comprises about 60 new growths, most of them belonging to this group, which have been submitted to the Microbiological Laboratory of the Department of Public Health for examination during the past eleven years. These do not comprise all the neoplasms probably of this nature submitted, inasmuch as a number have not been included owing to scanty material or for other reasons. It will, therefore, be seen that our experience with the microscopic appearances of these new growths has been fairly extensive.

In discussing the nature and origin of most of these neoplasms of the skin, we may first state our opinion that the majority of them, certainly the rodent ulcer group, are of epiblastic origin and are not endotheliomata. In this connexion vascular nævoid growths are of course excluded. We consider that melanomata are still open to discussion as to their nature.

In considering the histology of the different types of growths met with, the ontogenetic development of the epiblast must be considered. It must be admitted that, to a certain extent at least, the type of epiblastic development depends upon the situation where the cells find themselves. Thus the epiblast covering the chorionic villi forms a syncytium and Langhans' layer of cells. Other cells, similarly derived, form on the surface of the body a stratified epithelium. Generally, growths from such surface epithelium, which may have infolded into various cavities, such as the mouth, may form such diverse-looking structures as pilo-sebaceous glands, mammary glands, salivary glands, etc.. In other words, in spite of uniformity of origin and presumed equality of potentialities, the ultimate highest development of the cells depends

upon the structures amongst which they find themselves and their situation in relation to the whole body.

In this connexion it is conceivable that transplantation of the epiblastic covering of the chorionic villi to a denuded skin surface, after the manner of a skin graft, might lead to a successful "take," with the formation of a squamous epithelial surface, such as is natural to such a site. Such an experiment, as far as we know, has not yet been carried out, apart from its possible value in surgery, if successful. It might, moreover, throw a flood of light on certain cytological problems.

With such differentiation of cells, the question arises as to when during their ontogenetic development they lose entirely the potentialities to form other structures met with in the epiblastic system. Are we to consider that the cells forming the basement layer of the surface epidermis have lost entirely all latent potentialities to form sweat glands, sebaceous glands or any other skin structure except the squamous cells of the surface epithelium? Are we to consider that the cells forming pilo-sebaceous structures or sweat glands have similarly lost all capacity to form any other structure save that on which they are engaged? In our opinion the cells of the active parts of these various structures have in many cases not lost entirely all their potentialities in these respects. We believe that by virtue of the position of the cells such potentialities are suppressed or recessive, but that under certain circumstances expression may be given to them, though such expression may be very imperfect. The more remote the cell is ontogenetically from these other types of structure and the more highly specialized are its services, the less likely is the expression to be clear and distinct. For instance, one would very rarely expect to see any resemblance in cells derived from the squamous epithelium to the structures met with capping chorionic villi. Such is the case. Only exceptionally in cases of squamous epitheliomata does one find plasmoidal-looking masses which might possibly be interpreted as representing the syncytial covering of the villi. Again, in the pilo-sebaceous apparatus where a complicated gland structure is developed, one would expect to find less frequently in new growths derived from this part, clear attempts at cornification. This has been our experience, the nearest approach to such a differentiation being seen in the concentric arrangement of the cells in some cell masses. The cells forming the surface epithelium, however, have a less specialized work to perform. One would, therefore, expect a greater diversity in behaviour in new growths derived from such an origin. One would expect to find not only new growths-forming structures like the surface epithelium (squamous epitheliomata), but also new growths resembling in some degree the glandular structures originally derived from this layer of cells. Such seems to us to be the case. We seem able to trace not only squamous epitheliomata to the surface epithelium, but also certain growths resembling rodent ulcers, which in our opinion are, when typical, usually neoplasms derived from the pilo-sebaceous apparatus.

Considering more particularly the types of epithelial neoplasms of the skin, they seem broadly separable into two divisions which, however, grade one into the other. The one comprises, as a rule, broad down-growths which behave as would detached surface epithelium; in the other type the growth assumes more the appearance of finger-like processes, often separated into loculi, suggesting in general appearance the glandular structures attached to the skin. We would in fact make these two divisions represent in the first case new growths aping the surface epithelium and in the second case new growths aping more or less imperfectly the glandular adnexa of the skin.

In this connexion interesting appearances are often presented by the rodent ulcer type, which seem to suggest that the neoplastic activities are not confined to a single spot, but are concurrent or nearly concurrent in a group of closely associated glands. In some cases the peripherally situated affected structures seem less far advanced than the central ones.

From these observations and similar observations on squamous epihelioma and from clinical experience, we believe that these neoplastic changes begin not in a single cell or in a group of two or three cells, but affect contemporaneously a patch of cells or of glandular structures, so that all undergo the malignant changes at one time. Neoplasms of the skin and probably of elsewhere do not seem to arise from a microscopic centre, as it were, which gradually becomes visible and gradually extends, but are recognized first as a distinct patch.

In dealing with the new growths under discussion in this paper, we have divided them, as already mentioned, into two main types, which grade into each other. At one end we have placed typical rodent ulcers, derived, we believe, usually from the pilo-sebaceous structures; at the other end we have placed the typical squamous epitheliomata with their well-marked cell nests. Of these latter it has been unnecessary for us to give examples. Between these two extremities we have found all intermediate grades. We may perhaps shortly indicate the nature of these. Amongst the otherwise typical rodent ulcers one finds growths in which the cells are larger than usual, mitoses are very frequent and there may be a definite concentric arrangement of the cells. From these we pass imperceptibly into new growths in which it seems clear to us, from thickening of the surface epithelium and from direct continuity of the cell masses, that the growth has been derived from the basal layer of the epithelium and still shows in its upper type part undoubted prickle cells and in its lower part undoubted rodent cells. Here we believe that those cells of the new growth, which have found themselves from the site of their origin on the way to the surface, have undergone the modifications seen in surface-directed cells, whilst those that were directed downwards, have taken on the usual appearances of rodent ulcer cells, *i.e.*, resemble the mother cells of the downward-growing pilo-sebaceous glands. Going still further we get growths which are squamous epitheliomata in almost every respect save for the very imperfect formation of cell nests, which structures are merely indicated. We have grouped these forms under the following headings:—

(1) Typical basal cell epitheliomata derived, we

believe, usually from the pilo-sebaceous apparatus, comprising clinically and histologically typical rodent ulcers.

(2) Atypical basal cell epitheliomata derived, we believe, from the basal cell layer. They resemble very closely indeed the preceding, the cells being usually larger, mitoses more frequent and a concentric arrangement more evident, whilst the cell masses are irregular and ill-defined, usually without any definite marginal palisade layer.

(3) Atypical squamous epitheliomata comprising undoubted squamous epitheliomata, but showing appearances clearly indicating a relationship with the rodent type in an almost complete absence of cell nests.

(4) Typical squamous epitheliomata.

(5) Several anomalous growths are also included.

FIGURE I.
Typical basal cell epithelioma, showing growth composed of solid, reticular and budding processes.

FIGURE II.
Rodent ulcer, reticular type, showing the various stages in the formation of lumina (typical basal cell epithelioma).

Special Histological Details.

In the basal cell epitheliomata the cell masses and the stroma vary much in several particulars. The cell masses may be very large and rounded or scalloped, or they may consist of numerous smaller, rounded isolated masses, or of finger-like processes or may even present a reticular appearance. Moreover, these processes and masses may show varying degrees of subsidiary budding. As regards the stroma this may be scanty or abundant. It may be scanty between the masses, but prominent as septa, cutting off groups of masses. It may be dense and fibrous, resembling the scirrhus type of carcinoma, or it may be loose and œdematous, or infiltrated with such chronic reactionary cells as round cells, plasma cells and connective tissue cells. Though indicating thus the various differences that may be met with, we feel that it would be unwise to divide up these neoplasms according to such structural differences, inasmuch as different parts of one and the same new growth may vary to such an extent that one neoplasm would have been placed in three different categories. This applies more to the cell masses than to the stroma.

In some of the rodent ulcer growths an appearance is presented suggesting lumen formation. In our series of cases we have been able to trace this in some instances conclusively to incorporation of stroma by the strands of the new growth. These strands, growing round a portion of œdematous stroma, lead apparently to the cutting off of the nutritive supply to the included portion which consequently undergoes colliquation and eventually may disappear entirely, so that a space is left surrounded by the cells of the new growth, a space which on cursory examina-

tion might easily be mistaken for actual lumen formation in a cell mass. In all instances, in the growths we class as basal cell epitheliomata, a careful examination has led us to the opinion that such glandular-looking spaces had really an origin in this way. Owing to the very regular rounded appearance of some of these spaces, we do not feel, however, that we should assert dogmatically that all have origin as suggested, though stating that in every case in which we have seen this, some have certainly been traced to an origin from stroma.

It is necessary also to call attention to the fact that sometimes in large cell masses the central cells may undergo degeneration and form a small, irregular central cavity. Also, in some cases degenerative changes occur in the tumour cells which may lead to their gradual dissolution and areas may thus be left occupied by a loose reticulum representing the remaining cell processes.

Sometimes in the concentrically-arranged areas there was also a certain amount of degeneration leading to a small cavity.

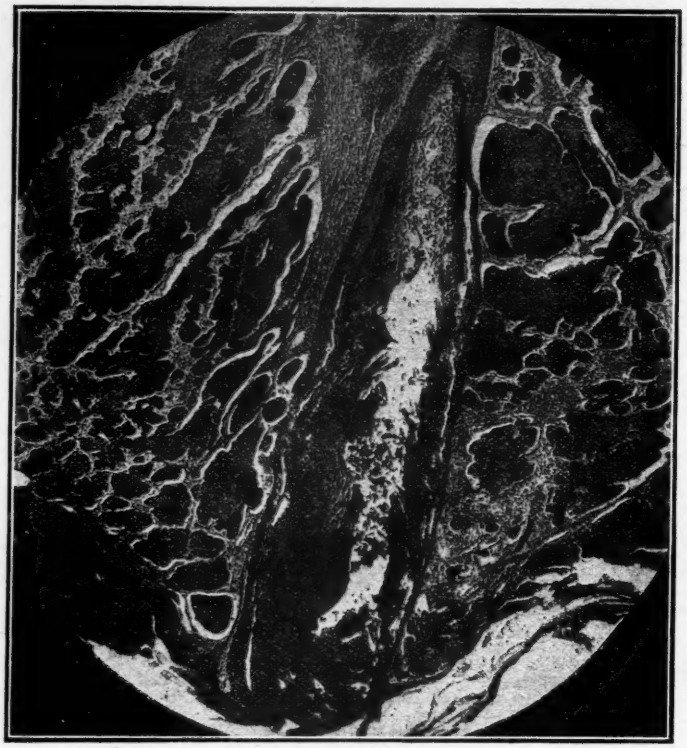

FIGURE III.
Rodent ulcer, with dilated hair follicle (typical basal cell epithelioma).

FIGURE IV.
Rodent ulcer, showing origin from hair follicle (typical basal cell epithelioma).

An interesting feature seen in one case (Figure III.), in which the hair follicles had dilated mouths, was what may be termed a keratosis extending into the open mouth of the hair follicle. In this connexion we would raise the point as to the part contributed to the growing hair by the lining cells of the hair follicles. We are inclined to look upon a hair as being an inverted papilloma and a skin papilloma as being, so to speak, a coarse gigantic everted hair; this analogy must, of course, not be carried too far. As all the surface implicated contributes to the cell mass forming the papilloma, so we think should all the cell mass involuted to form the hair follicles contribute to the mass of the emerging hair. The cells lining the follicle, as well as those capping the papilloma, must by some means eventually reach the surface, if not already there, and be cast off. We look upon the central parts of the hair as being formed by the papilla and are inclined to think that layer upon layer is added as the hair progresses towards the surface. The flattened scales of the lining walls contribute their quota by adding the imbricate scales met with on hairs and in this way are removed the effete cells that otherwise would accumulate. That the cells in the upper part of the follicle can accumulate if an obstruc-

tion exists, is well seen in some sections of skin structures, where the mouth of the hair follicle is filled with numerous concentric, flattened scales in instances where the papilla has disappeared.

The sixty cases examined microscopically were comprised as follows: 34 typical basal cell epithelomata, 17 atypical basal cell epitheliomata, 5 atypical squamous epitheliomata, 1 typical squamous epithelioma and 3 anomalous growths, *i.e.*:—

(*a*) An adenomatous type, probably derived from mouth glands in a patient with atypical basal cell epithelioma elsewhere.
(*b*) Melanoma, resembling a rodent growth in places, occurring on the sternum.
(*c*) An anomalous growth of syringomatous nature.

As the histological report *in toto* of the sixty cases is too extensive for publication in the *Journal*, we propose to include only a description of a few sections belonging to the various divisions that we have indicated.

(1) Typical Basal Cell Epitheliomata.

CASE 7.—H. 3169, McI., male, January 30, 1919. The patient had a chronic ulcer of the upper lip for two months. He denied having had syphilis.

Macroscopic Appearance.—A small piece of tissue, with an ulcerated surface.

Microscopic Appearance.—The growth is formed of interlacing, usually narrow, columns, in some cases together with large masses, sometimes showing a marginal palisade layer and situated in a moderate amount of fibrous stroma. The cells composing the growth are for the most part spindle-shaped and closely packed. At the edge of the growth there is an isolated portion of new growth, clearly traceable to a hair follicle, whose external opening is blocked by concentric scales and from whose distal end extend irregular branching processes of new growth (Figure IV.). There appears to be a break of continuity between this portion and the adjacent part of the main growth, with which is also associated the remains of another hair follicle. The stroma is rather dense and contains scattered cells. The main growth approaches the neck of the pilo-sebaceous follicle of the subsidiary growth, being separated from it by a narrow band of fibrous stroma. On the other hand, the main and the mass of the actual subsidiary growth are separated by a broad band. Beyond this another hair follicle shows a suspicious appearance of undergoing the same change.

Diagnosis.—Rodent ulcer, of pilo-sebaceous origin, with interlacing masses of spindle cells and dense stroma. Typical basal cell epithelioma.

CASE 26.—H. 3616, J.O., male, October 8, 1919. No history was supplied.

Macroscopic Appearance.—A round, raised, papillomatous growth, ulcerated on the surface. On section there appears to be a down-growth of epithelium.

Microscopic Appearance.—There is ulceration of the surface epidermis. The growth is composed of various sized, numerous, isolated and intercommunicating masses of a reticular appearance. The cells composing these masses are not closely packed, with only the nucleus discernible, but vary greatly in shape. In some of the masses are often to be seen vacuolated spaces, corresponding to the size of a cell and connecting the groups of nuclei can sometimes be seen a fibrillary network corresponding to the spongioplasm of the cell, indicating a degeneration of the cytoplasm and, in some cases, of the entire cell. There is a tendency to a concentric arrangement of the cells. At the base of the growth there are some collections of small round cells and between some of the masses are thin strands of fibrous tissue. The stroma between the lobules can be traced in places into them; all gradations are seen between the ordinary stroma so incorporated and the spaces in the lobules occupied by a few fibrillæ and occasional degenerated nuclei, the change suggesting a colliquative process due to cutting off of the nutritive supply. The final result gives almost a fenestrated appearance to some of the lobules. The site of origin is indefinite.

Diagnosis.—Rodent ulcer, with degeneration of the stroma. Typical basal cell epithelioma.

CASE 23.—H. 2876, male, aged 55 years, July 18, 1918. The patient had a solid growth from the face. It had been removed two years before, but recurred, growing very slowly.

Macroscopic Appearance.—A small, circumscribed growth in the skin, about 1 cm. × 0.6 cm., with a couple of minute cavities in it.

Microscopic Appearance.—There is a tendency to lobulation of the growth, which consists of a reticular formation, being composed of spaces, both large and small, which are for the most part round or oval in shape. They are lined by spindle-shaped cells, one, two or more layers in thickness. These spaces are remarkably free of contents, but in some a few stroma cells remain, whilst all gradations can be traced between narrow columns cutting off islands of unaffected stroma, to the same stroma being enclosed totally by these strands, thus producing degeneration and eventually the entire disappearance of the stroma, leaving only small or large spaces lined by epithelial cells, aping exactly an acinous arrangement. The tumour cells are of a spindle shape and closely packed. There are a few areas where the growth appears more cellular and here there is a tendency to a concentric arrangement of the cells. The stroma is usually scanty, but occasionally fibrous and cellular. The origin is indefinite.

Diagnosis.—Rodent ulcer. Typical basal cell epithelioma.

CASE 27.—H. 3580, Mrs. W., September 19, 1919. No history was supplied. (H. 3579 and H. 3580 are from the same patient.)

Macroscopic Appearance.—A small, warty growth.

Microscopic Appearance.—The growth is made up of: (*a*) a reticular type, the meshes being composed of rarified stroma; (*b*) solid masses of cells showing a tendency to a concentric arrangement; and (*c*) small masses showing marked budding. The various types grade into each other. The cells composing the reticular portion show a tendency to a concentric arrangement and for the most part they are somewhat loosely associated and polyhedral to elongated in shape. The cells composing the budding masses are more closely packed and tend to be elongated or spindle in shape, with a marginal palisade layer. In some of the larger masses the concentric arrangement has resulted in spaces filled with an amorphous material lined with much flattened cells, this being an extension of the concentric arrangement with degeneration. The stroma is moderately cellular and beneath the growth there are some collections of small round cells. The origin is indefinite.

Diagnosis.—Rodent ulcer, showing reticular, budding and solid mass types in the same growth. Typical basal cell epithelioma.

(2) Atypical Basal Cell Epitheliomata.

CASE 41.—H. 2945, September 5, 1918. A rodent ulcer (?) from the nose.

Macroscopic Appearance.—A very irregular, eroded ulcer, about 1.25 cm. in diameter.

Microscopic Appearance.—There is a broad area of ulceration on the surface, beyond which the growth advances extensively under the intact but cornified epithelium. The cells in places tend to a concentric arrangement. On each side of the ulcerated area, in one case adjacent, in another a little removed, the growth appears continuous with the surface epithelium by means of irregular, ill-defined down-growths. Near the surface the growth presents evidence of prickle cells, but soon the cells assume a large spindle-cell type with numerous mitoses. The cells are larger than those in a typical rodent ulcer and a palisade layer is not evident. The masses are irregular in shape and are sometimes in narrow strands, sometimes in large masses and often show irregular processes. Some of the large masses have degenerated in the centre, to form a granular eosin-stained matrix, with numerous nuclear fragments around its edge. The stroma in the ulcerated region shows a marked polymorpho-nuclear infiltration, whilst deeper in the corium there are abundant plasma, round and connective tissue cells. Elsewhere the stroma is loose and fibrous, with scattered cells and sometimes with groups of plasma cells.

Diagnosis.—Atypical basal cell epithelioma.

CASE 42.—H. 1433, B.G., male, April 1, 1915. A growth removed from the side of the nose.

Macroscopic Appearance.—A piece of tissue with an irregular ulcerated area.

Microscopic Appearance.—There is partial ulceration of the surface epidermis above the growth, which is composed of irregular masses, sometimes with finger-like projections, surrounded by fibrous tissue. The cells are closely packed and spindle to polyhedral in shape and there is a somewhat marked tendency to a concentric arrangement of the cells in places. There is a continuity of the growth with the surface epidermis. The cells maintain their prickle cell type in one of the down-growths for some distance. At the deepest portion of this down-growth the cells are showing marked mitosis and surrounding it is a small cell infiltration. There is no definite marginal palisade layer to the masses, although in some there is a slight tendency to such. At one margin of the growth there is a small cell infiltration with some plasma cells. A plasma cell infiltration is also to be noticed beneath the neoplasm. The stroma is dense in places.

Diagnosis.—Atypical basal cell epithelioma, showing a prickle cell down-growth changing into a type resembling a basal cell epithelioma; derivation from the surface epithelium.

CASE 45.—H. 1899, male, August 17, 1916. A growth removed from the face.

Macroscopic Appearance.—A projecting growth, slightly warty, the size of an almond.

Microscopic Appearance.—There is ulceration of the surface and beyond this the epithelium is thinned. The growth is in parts reticular, in parts composed of solid masses. It shows numerous finger-like processes. The cells are closely packed, presenting in parts a definite palisade layer, and are rounded, with a tendency to become elongated. Near the surface the cells become large, with large nuclei and well-marked nucleoli, tending occasionally to form imperfect cell nests. The stroma is in places fairly dense, with numerous connective tissue cells and on the surface giving place to a loose granulation tissue, with numerous polymorpho-nuclear cells. In some of the deeper areas the stroma becomes loose and œdematous-looking, with scattered cells, and in some situations gives rise to an appearance of cyst formation between the masses of new growth, these cysts being sometimes almost empty, with a few scattered fibrillæ.

Diagnosis.—Atypical basal cell epithelioma approximating in places to a squamous epithelioma.

(3) Atypical Squamous Epitheliomata.

CASE 51.—H. 1264, Mrs. C., October 7, 1914.—A growth removed from the forehead.

Macroscopic Appearance.—An elongated whitish growth, the size of a kidney bean.

Microscopic Appearance.—The growth is a squamous epithelioma of rather atypical appearance. It is composed of columns of cells, some narrow, others broad. These masses are supported by a rather scanty fibrous stroma. The cells are large and irregular, with occasional imperfect cell nests. The edge of the growth is ill defined and the advancing columns are narrow. There is no round-cell infiltration in advance. The site of origin is not indicated in the section, as the tumour mass is only observed growing beneath a normal surface epidermis.

Diagnosis.—Atypical epithelioma, differing from an ordinary squamous epithelioma in the narrowness of the columns and the slight attempts at keratinization and not progressing quickly. In the stroma beyond there is no particular change.

CASE 53.—H. 3638, C.R., male, October 22, 1919. The patient had complained of a growth on the face for six months, said to be due to a cut with a razor. There was no glandular enlargement.

Macroscopic Appearance.—A round, papillomatous growth, breaking down and cheesy in the centre, about 0.8 cm. in diameter.

Microscopic Appearance.—The surface epidermis shows ulceration. The growth is composed of large masses and intercommunicating strands, some of the former showing necrosis in the centre. There is a marked tendency to concentric arrangement of the cells and there are cell nests. The cells for the most part are of a large size and polygonal shape, with well-marked prickles, showing numerous mitoses in parts. However, in areas of more recent extension, the cells are closely packed, only the nuclei being seen, and of a spindle or elongated shape, these cells thus resembling those of a rodent ulcer. There is a dense cellular infiltration around and situated between the component parts of the growth, composed of plasma and small round cells. In the plasma cell infiltration are a few very large foreign-body giant cells, with numerous nuclei. The origin is from the surface epidermis.

Diagnosis.—A frank squamous epithelioma, showing some exaggeration of the basal cell type.

(4) Anomalous Growths.

Melanoma Resembling a Rodent Growth in Places.

CASE 49.—H. 1912, female, August 31, 1916. A tumour removed from the skin over the region of the sternum. It had been present for ten years and began after an injury (?).

Macroscopic Appearance.—A soft, somewhat small ulcer, the edges showing no induration.

Microscopic Appearance.—The growth is composed of irregular-shaped, more or less solid masses, many of a large size and well defined, somewhat scalloped. They show in parts a marginal palisade layer and are composed largely of cells of a spindle to elongated shape. In these masses are a few spaces containing incorporated stroma. The growth is circumscribed by a relatively fibrous stroma and beyond are several collections of round cells. Occasional cells in the cell masses show granules of melanin. In the stroma around the well-defined masses are in one place a number of medium-sized, irregular cells, some containing melanin granules and occupying spaces in the stroma. They are accompanied by a number of smaller cells, rather degenerated. The cells infiltrating the stroma have the usual arrangement of melanoma cells. The large, compact, rodent-like masses seem also to be composed of melanoma cells, as judged by the occasional presence of pigment.

Diagnosis.—The new growth seems to be a melanoma which has assumed a rodent-like appearance. The unusual situation of the growth also supports this.

Reports of Cases.

A CASE OF PERFORATING JEJUNAL ULCER FOLLOWING POSTERIOR GASTRO-ENTEROSTOMY.

By **Alan T. Roberts, M.B., Ch.M., F.R.C.S. (Ed.),**
Medical Superintendent, Newcastle Hospital, Newcastle, New South Wales.

Patient, R.A.B., *æt.* 34, a returned soldier. was admitted to the Manchester Royal Infirmary, February 14, 1919, suffering from acute abdominal pain of five hours' duration. The temperature was 36.6° C. and the pulse-rate 100. The abdomen was rigid and tender; there was a distinct ring retraction at the transpyloric plane.

He had two large abdominal scars, one 12.5 cm. long, a right rectus incision and a mid-line supra-pubic incision 10 cm. in length. He stated that on May 27, 1917, he was taken suddenly ill whilst in the trenches and was operated on two hours afterwards in a casualty clearing station. He was told that he had had a "perforated ulcer." Within two or three months of his convalescence he had suffered from indigestion and pain after food, similar to before his attack. A diagnosis of a recurrence of the perforation was made and I operated one hour after admission through a mid-line incision above the umbilicus. When the peritoneum was opened, the abdomen was found to be full of gastric contents.

Examination of the duodenum and anterior wall of the stomach revealed no perforation, but there were some adhesions and thickening around the first part of the duodenum.

On throwing up the transverse colon and omentum it was seen that a posterior gastro-enterostomy had been performed at the previous operation and that a perforation had occurred on the proximal loop of the jejunum.

The perforation was through the base of an ulcer, 2.5 cm. in diameter, on the anterior wall of the loop of bowel. I closed the perforation with linen thread sutures and inverted

the ulcer by interrupted sutures. After the gastric contents had been mopped out, the abdomen was closed without drainage.

The patient made an uneventful recovery and was discharged from hospital a month later, the only important detail of the after-treatment being the administration of a teaspoonful of *sodii bicarb.* three times a day after each meal, which treatment he was instructed to continue for at least a year.

When seen three months after the operation he was progressing well and had had no further symptoms of indigestion.

The incidence of jejunal ulcer following gastro-enterostomy performed for other than malignant disease (there are now 100 cases on record) is sufficiently marked to justify attention being directed to its cause and possible avoidance. The available statistics show that the majority of cases (52 out of 77) follow anterior gastro-enterostomy. The size of the stoma has an important bearing on the causation of peptic ulcer and a sufficiently large opening, fully 7.5 cm., should be made in order to allow free inter-mixture of the acid contents of the stomach with the alkaline contents of the jejunum.

The administration of large doses of alkalies after food for the purpose of neutralizing the acid contents of the stomach tends to inhibit the formation of a peptic ulcer. This was a detail insisted on by Mr. Burgess and several other Manchester surgeons, who ordered a teaspoonful of bicarbonate of soda to be taken three times a day after meals for one year by all patients who had had gastro-enterostomy performed for non-malignant disease.

I think that this detail might well be included as a routine in the after-treatment of these cases.

Reviews.

THE PITUITARY GLAND.

The importance of the organs of internal secretion in relation to human well-being is becoming increasingly recognized by members of the profession and the publication of Dr. Blair Bell's book on the pituitary[1] is welcome as an addition to our present knowledge of that organ. Dr. Bell has himself done considerable work in regard to the histology, physiology and pathology of the pituitary gland and in his book has availed himself largely of the work of other investigators.

The first part of the volume deals with the development, the anatomy, macroscopical and histological, and the comparative anatomy of the gland. This, like the succeeding sections, is very well illustrated and gives a clear idea of the development and very varied structure of the pituitary in the lowest vertebrates, the mammalia and in man.

In the section dealing with physiology, histological investigations are detailed and the peculiar changes produced in the *pars anterior* by pregnancy and hibernation are discussed. The results of injections of the whole gland and of the anterior and posterior parts respectively are stated and subsequently the effects produced by removal of the whole or part of the gland. The author details the operative measures in experiments on animals and compares the results he has obtained with those described by other investigators, especially by Cushing and Paulesco. From his own researches he believes that the syndrome of *dystrophia adiposo-genitalis* is not due simply to the destruction of the *pars anterior*, but that the cutting off of the blood supply by compression and separation of the infundibular stalk is the essential cause.

The relations of the pituitary to other hormonopoietic organs are considered in detail; the conclusion is reached that, while at present it is not possible to give a definite and lucid exposition of the exact dependence of these organs on one another, such information is to be expected as the result of further research.

The symptomatology of lesions of the pituitary gland is then considered, both as to excess and deficiency of secretion and as to other pathological conditions, such as those produced by pressure on the optic tract.

In a general consideration of the pathology of the gland the author enunciates the physiological unity of the pituitary body and talks of "the obsession of the duality of the different lobes which still overshadows us." He points out, as has been demonstrated by Cushing, that, while the lowered body temperature of *dystrophia adiposo-genitalis* can be raised only by an extract of the anterior lobe, the low blood pressure can be raised and the carbo-hydrate tolerance reduced by an extract of the posterior lobe.

The treatment of lesions of the pituitary, except in so far as deficiency of the secretion can be supplemented, is mainly surgical and the procedures to be undertaken are given with helpful illustrations. The lower mortality of the orbito-nasal operation, in the author's opinion, makes it preferable to the frontal method.

The work concludes with a brief account of the therapeutical uses of pituitary extracts.

It will be gathered from this brief summary of the contents of the volume that it is a comprehensive account of the pituitary in its various aspects. The reputation of the author as an investigator adds greatly to the value of the book. References are exact and frequent and the results of other workers are given, even when they do not agree with Dr. Blair Bell himself.

The book is very well printed and illustrated and may be commended to all those who desire to acquaint themselves with the present position of knowledge in regard to this very interesting and suggestive branch of medicine.

[1] The Pituitary: A Study of the Morphology, Physiology, Pathology and Surgical Treatment of the Pituitary, Together with an Account of the Therapeutical Uses of the Extracts made from this Organ, by W. Blair Bell; 1919. London: Baillière, Tindall & Cox; Royal 8vo., pp. 348, with seven coloured plates and 190 figures in the text. Price, 30s. net.

Naval and Military.

APPOINTMENTS.

The following appointments, etc., have been notified in the *Commonwealth of Australia Gazette* No. 36 of April 22, 1920:—

Australian Imperial Force.

Third Military District.

Captain J. W. Ford, Australian Army Medical Corps, having resigned, his appointment in the Australian Imperial Force is terminated in England on 1st January, 1920, but to take effect from 15th of January, 1920.

Australian Military Forces.

To be Major-General—

Captain and Brevet Lieutenant-Colonel Sir N. R. Howse, V.C., K.C.B., Reserve of Officers, 2nd Military District, 1st January, 1920.

To be Colonel—

Honorary Major H. C. Maudsley, C.M.G., C.B.E., Reserve of Officers, 3rd Military District, 1st January, 1920.

First Military District.

To be Captains—

G. H. Cameron,
P. J. B. Murphy,
H. W. Tilling,
V. N. B. Willis,
D. Aiken,
W. Croose,
F. G. Power,
R. Power.

Second Military District.

To be Majors—

E. K. Parry, M.C.,
C. B. Pym.

To be Captains—

S. McLennan,
G. F. Hill,
C. P. Rosenthal,
S. A. Railton, M.C.,
D. I. R. Smith,
M. R. Finlayson,
K. S. M. Brown,
R. K. Rae,
J. H. B. Brown, M.C.,

L. J. Hunter, M.C.,
C. D. Bateman,
J. F. G. Fitzhardinge, M.C.,
A. M. Aspinall,
J. Stewart,
J. R. Barriskill,
B. McN. Beith,
C. N. Matheson,
S. A. McDonnell,
A. J. D. Howard,
H. L. Beale,
H. J. Orr,
G. P. Arnold, M.C.,
W. K. W. Flook,
A. G. Brydon,
C. G. Allen,
M. Archdoll,
C. R. Hodgson,
F. C. Thompson,
C. A. Mitchell,
J. W. Smith,
L. T. Allsop,
N. G. Sutton,
J. J. C. Lamrock,
E. Tyrie,
T. G. Allen,
E. M. McCaffrey,
H. Symonds,
H. G. B. Bruce,
R. E. Nowland, M.C.,
W. F. Pattinson,
A. R. Hudson,
J. M. Maclean,
G. M. Faithful,
A. J. Hope,
T. B. Clouston,
M. C. Hobson,
F. E. Dawson,
R. P. Rundle,
W. Broad,
M. J. Frizell.

Third Military District.

To be Majors—
D. Bennett,
R. C. Withington.

To be Captains—
J. S. Yule, M.C.,
T. R. Jagger, M.C.,
M. J. Holmes, D.S.O.,
J. C. M. Harper, M.C.,
E. W. V. Woods, M.C.,
J. L. Ross-Soden,
H. F. H. Elvins,
J. R. Williams,
V. C. Brown, M.C.,
C. E. Watson,
J. M. Henderson, M.C.,
F. E. T. True, M.C.,
P. J. Campbell,
F. H. James, M.C.,
A. E. Brown,
B. D. Fethers,
K. C. Purnell,
J. W. Grieve,
E. A. Spowers,
A. W. Le Soeuf,
A. H. Barrett,
J. P. Farrell,
D. P. Greenham,
W. G. H. Tregear,
J. P. Horgan,
D. H. Bodycomb, M.C.
E. T. Cato, M.C.,
T. J. K. Whittam,
R. F. Le Soeuf,
N. A. Maclure,
J. R. Robertson,
E. H. Britten,
A. H. Crowley,
W. A. Luke,
F. R. Meagher,
C. Maxwell,
J. J. Kelly,
D. G. May,
D. C. Worch,
H. G. Brown,
W. N. Trenerry.

Fourth Military District.

To be Major—
J. B. Birch, M.C..

To be Captains—
R. L. Kenihan, M.C.,
G. H. B. Black,
N. B. G. Abbott,
F. M. Wilcox,
H. R. Pomroy.

Fifth Military District.

To be Captains—
E. N. Bateman,
A. Clarke,
J. A. R. Mitchell.

INEBRIATE INSTITUTIONS OF VICTORIA.

The twelfth annual report of the Inspector of Inebriate Institutions of Victoria for the year ending December 31, 1918, shows to some extent the condition of the public in regard to inebriate habits.

The total number of convictions for drunkenness for the year is given as 3,012, of which 2,363 were of males and 649 of females. These figures indicate a very considerable reduction from the average number of the preceding eight years.

Of the two recognized inebriate institutions in the State, one, "Lara," is entirely supported by the Government and has accommodation for male inebriates; the other, "Brightside," is a Salvation Army institution, subsidized by the State and is used for the treatment of female patients.

The number of males admitted during the period under review shows an increase over the average of the last three years. In 11.4% of admissions the causation of intemperance is stated to be "army occupations or war conditions."

Evidence is brought forward in the report indicating that there is an increase in the abuse of narcotic drugs amongst the public.

An analysis of the figures of the last six years shows that occupation plays a predominant part in the creation of drug habits, doctors, chemists, dentists and nurses forming 44% of the total number of persons admitted. It is pointed out that the cocaine habit is the most difficult to cure when once firmly established.

The work done at both institutions is regarded as efficient and highly satisfactory.

It is not claimed that these measures deal satisfactorily with the whole question of reform of the inebriate, because admission is necessarily restricted to cases with some hope of recovery.

It is stated that neither the wealthy drunkard nor the submerged alcoholic wreck can be adequately dealt with in institutions of this nature.

THE LIST OF MEMBERS OF THE AUSTRALIAN BRANCHES OF THE BRITISH MEDICAL ASSOCIATION.

Our attention has been drawn to the fact that in the list of members of the Branches of the British Medical Association in Australia, published as a supplement to the issue of *The Medical Journal of Australia* of March 6, 1920, the military decorations are appended to the names of the members of the New South Wales Branch, but not to any others. The lists are compiled by the officials of the several Branches and we arrange for their publication in the form determined by the Branches. We do not interfere with the methods of presentation chosen, nor do we bear any responsibility for the accuracy of the lists,

The Medical Journal of Australia.

SATURDAY, MAY 1, 1920.

Our War Nurses.

In this topsy-turvy world of ours, when one grave danger has been averted at a costly price, we must need increase our burdens and exaggerate our difficulties and trials by allowing an economic problem to complicate the settling of our account and to interfere with the work of restoration. No sooner is the war over, than those who took little or no part in the great issue, seek to paralyse our industrial activity by shirking their civil tasks and by demanding an ever-increasing wage for manual work indifferently and slowly accomplished. Lessened supplies of all commodities in common use added to a real or artificial shortage of food stuffs have resulted as a natural sequence of the growing industrial upheaval. In their endeavour to gain the mastery over capital, the industrial workers are creating a vicious circle which guides the instrument of destruction intended for the employers of labour slowly and surely back to themselves. Everyone is involved in the imbroglio, but the individual whose capital of trade is his or her brains and trained skill, fares worst of all. We hear a great deal of the measures which are to be introduced for the remedy of profiteering, industrial unrest, high cost of living and frank rebellion, but it would be foolish indeed to place our trust in any of these paper promises, because their authors are too often implicated in the many causes of the impasse. Time, patience and hard work are the remedies, and in the interval we must refuse to depart from the ideals which sentiments of justice and humanity dictate. The medical profession has its problems in the present world situation, problems that call for more than ordinary skill and good judgement. One of the post-war economic questions that has presented itself to the medical profession, is that of safeguarding the immediate and remote future of those of its members who sacrificed much in the hour of our Empire's need. This journal has sought to identify itself with the slogan of "preference to returned men, other things being equal." It will continue to demand the application of the principle involved until no further need for action exists. We would extend the same principle to our brave nurses whose achievements on the field have awakened the wonderment of everyone. The medical profession can do more than demand that they receive the first offer. They can give the first offer to our returned nurses.

From inquiries instituted at the Repatriation Department we learn that absolute preference is given to returned nurses in all appointments to the Department's Anzac hostels, convalescent homes and communal tuberculosis farms. Further, the Department has intimated to the Australian Red Cross Society that it is desired that the policy of absolute preference be applied in all the States in connexion with appointment to vacant positions for nurses in the many homes and institutions under its care. In Queensland, there is a regulation to the effect that all appointments of matrons of Red Cross convalescent homes shall be confined to members of the Australian Trained Nurses' Association or kindred organizations and, all things being equal, preference shall be given to returned Army nursing sisters. In New South Wales steps are being taken by the executive of the local Branch of the Red Cross Society to replace by returned sisters all those matrons and nurses employed in their convalescent homes who have not seen active service overseas. In Victoria, preference is given to returned nurses in appointments to vacant positions at Red Cross institutions. In South Australia a promise has been given that in all future appointments, preference will be given to returned nurses. In Western Australia the whole staff of nurses at the Red Cross institution at Kalamunda consists of returned nurses. In the Southern Division of the Tasmanian Branch the principle of preference to returned nurses has been respected and will be recognized in the future. There is no report from the Northern Division. It will thus be seen that the returned nurse may expect sympathetic treatment from the managers of the hostels, convalescent homes and other institutions under the control of the Repatriation Department and of the Australian Red Cross Society.

Returned nurses are eligible for all the benefits and allowances accorded to soldiers under the *Repatriation Act*. A returned nurse may register for

employment at the State Branch and while she is unemployed, she can draw a sustenance allowance for herself and for those who are dependent on her. Nurses who owned and depended upon a business prior to enlistment and disposed of the business before enlisting, are entitled to submit an application for assistance to purchase a similar business. It will be noted that the wording is somewhat indefinite; the Department evidently does not intend to render itself liable for considerable sums of money for the purpose of re-establishing a returned nurse in a nursing home or other business with expensive equipment. Moreover the conditions are restricted. Nurses who had entered or who had intended to enter upon a university or other course of professional training prior to enlistment, may be granted some facilities and a small loan to enable them to purchase books, instruments, etc. Sustenance and living allowances are paid during the training period. In the next place the Department is prepared to pay the fees not exceeding £40 for a nurse desiring to undergo a course of training in obstetric nursing for the purpose of increasing her efficiency. A grant not exceeding £50 is allowed for the purchase of "tools of trade," professional instruments or other articles of personal equipment necessary for the vocation of the applicant. The Department pays the travelling expenses of nurses incurred in the securing of employment. Under the provisions of the *War Service Homes Act*, a nurse, who is not the owner of a dwelling house, can obtain a loan of not exceeding £700 for the purchase of a hospital, sanatorium or nursing home. The nurse may join with one or more nurses and each returned nurse can borrow this sum from the Department. Finally nurses who happen to be "widows in necessitous circumstances," may receive a gift of £25 for the purchase of furniture. From the foregoing, it will be seen that a nurse may receive some valuable assistance from the Department. Perhaps the most valuable is that of special training either in nursing or in some other line of occupation, together with a living allowance. It is definitely set out that all the benefits are granted conditionally and further that one applicant is not eligible for all the benefits enumerated.

The number of returned nurses entering their names for employment in the books of the Department of Repatriation is obviously not an index of the extent of unemployment among these excellent women. There are many who seek institutional or private work without applying to the Department, while the number of those who have taken up some other form of occupation because of the apparent difficulty in finding nursing work to do, is by no means small. In the absence of accurate information concerning the number of returned nurses desiring employment in their own profession throughout the Commonwealth, we have endeavoured to gain some guidance from the Repatriation Department. The following figures are significant and reveal the need for action by the medical profession. In New South Wales 84 nurses have applied to the Department for employment. Positions were found for 19. The applications of a further seven were allowed to lapse, so that in 58 instances the nurses have sought nursing employment and have sought it in vain. In Victoria ten returned nurses applied for employment and positions were secured for seven. In two cases the applications lapsed, so that only one returned nurse is receiving sustenance allowance pending her employment as a nurse. In Queensland four returned nurses have sought for positions and are still waiting. In South Australia there have been no applications. In Western Australia two returned nurses have sought employment. No positions have yet been found for them. Lastly in Tasmania there have been no applications. Thus in the whole Commonwealth 65 returned nurses out of a total of 100 who made applications for nursing employment, have failed to find positions. It is but simple justice to the Department to state that every effort has been made by the responsible officers to achieve something for these excellent women. In addition to the 100 nurses, a considerable number are receiving what is termed medical sustenance, while numerous applications for training in obstetric nursing have been received and approved. In some cases, nurses have been granted facilities to learn steno-typing and for other forms of vocational training.

Medical practitioners frequently find it necessary or advisable to employ nurses in their private consulting rooms. A well trained nurse is usually willing and able to relieve the practitioner of his book-keeping, letter-writing and entries in his case books or cards. We would appeal to those who are seeking a

nurse-secretary, to give an absolute preference to our returned nurses. The Repatriation Department will give facilities, if desired, for the training of a nurse in stenography and typewriting. In the next place, it may be that some practitioners who have hitherto not considered the proposal to employ a nurse-secretary in their practices, might give this matter serious consideration. Busy general practitioners frequently neglect to keep a proper record of their cases and it is notorious that their system of book-keeping is of a kind that would tax the powers of a certified accountant to understand. The pecuniary loss entailed by defective book-keeping must be considerable. Might it not be economical to have someone to do this work properly? The Department of Repatriation would defray the cost of training in book-keeping of a returned nurse. In the third place, it lies in the palm of the hand of the medical profession to determine that matrons and sisters at hospitals are selected from among our returned nurses. A little good will, a little vigilance, a little justice, and the 65 returned nurses whose names are now entered on the books of the Department of Repatriation, would find congenial employment. No one will dare to say that they do not deserve it.

THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH.

Among the many valuable benefactions of Mr. John D. Rockefeller, none has a higher aim or a more practical application than the Rockefeller Institute for Medical Research. This institute was founded in 1901, in New York, and obtained a charter in that year. Its objects are set out in the following terms:—To conduct, assist and encourage investigations in the sciences and arts of hygiene, medicine and surgery and allied subjects, in the nature and causes of disease and the methods of its prevention and treatment; to make knowledge relating to these various subjects available for the protection of the health of the public and the improved treatment of disease and injury. The means by which these objects may be attained include research, publication, education, the establishment and maintenance of charitable or benevolent activities, agencies or institutions and the aid of any other such activities, agencies or institutions already established or to be established. In view of the movement on foot in Australia for the establishment of research institutes in connexion with public hospitals, we venture to give an account of the organization and significance of this magnificent undertaking. In doing so, we would wish it to be understood that the medical profession throughout the world is dependent for the major part of its progress on well-conducted research and that the well-being of the community is enhanced by the establishment of every new research institution, more especially those which are associated with hospitals. Men like Mr. John D. Rockefeller, have shown the best way of using amassed wealth. It is far better to "unload" in favour of progress in preventive or curative medicine while the donor is alive, than to cling to money until the brink of the grave is reached, with the certain knowledge that the benefactions will be greatly reduced by death duties and so rendered less effective.

Mr. John D. Rockefeller has added endowment on endowment, until the Institute has become rich enough to carry out its excellent functions. Moreover, a special fund has been set aside to provide pensions for the members of the scientific staff, a provision of great wisdom, seeing that the workers in the laboratory are playing with their lives in a highly dangerous environment and are not allowed to undertake work for remuneration outside the institution. The members of the staff are well paid, at all events in comparison with similar workers in other countries. The research worker is nowhere given an opportunity of becoming rich. All discoveries and inventions made by persons working for payment in the Institute become the property of the Institute, to be placed freely by it at the service of humanity in accordance with the beneficent purposes of the founder. The regulations of the institution and of the attached hospital are framed in such a manner that everyone participating in the work is required to give expert service in a whole-hearted manner, to the advancement of knowledge and to the benefit of humanity.

The Institute is governed by a Board of Trustees and a Board of Scientific Directors. The former includes two members of the Board of Scientific Directors. It is charged with the care and maintenance of the endowment and property of the Institute. The Board of Scientific Directors has complete control of the scientific work and of the administration of the several departments. The Institute is divided into three departments:—The General Laboratories, the Hospital and the Department of Animal Pathology. There is a Director at the head of each. The Director of the Laboratories is Dr. Simon Flexner; the Director of the Hospital is Dr. Rufus Cole and the Director of the Department of Animal Pathology is Dr. Theobald Smith.

Under the control of Dr. Simon Flexner are the following divisions:—Pathology and Bacteriology, in which Drs. Noguchi, Rous, Murphy and Brown assist the Director; Physiology and Pharmacology, with Dr. Meltzer as head; Chemistry, in charge of Dr. Levene; Experimental Surgery in charge of Dr. Alexis Carrel; and Experimental Biology in charge of Dr. J. Loeb.

The hospital has accommodation for about sixty patients. The patients are selected for admission on account of the diseases which are being investigated at the time. The building is a structure with seven stories. At the level of the third story it is connected by means of a bridge with an isolation pavilion and with the laboratories beyond. The floors below are occupied by administrative offices, quarters for the resident staff and the like. The hospital is

planned so as to give the staff and nurses unusual facilities for attending to the patients. The patients are admitted on the order of the Resident Physician. It is recognized that the patients have the right to demand the most effective treatment that can be applied, notwithstanding the fact that they serve for the purposes of observation and study. Those who are entrusted with clinical work, are also required to undertake laboratory research simultaneously. The nurses are fully trained and there are no probationer nurses.

The Department of Animal Pathology was opened in 1916 in a separate institution. It is situated near Princeton in New Jersey. Its object is to provide facilities for the study of diseases of animals which are of economic importance and from which light might be thrown upon the problems of human pathology. There is no teaching in the Institute, nothing but research.

The staff is divided into grades. There are the Members of the Institute, the Associate Members, the Associates, the Assistants and the Fellows. In the Hospital there is a Physician, an Assistant Physician, a Resident Physician, and an Assistant Resident Physician.

The Institute issues periodically its *Studies from the Rockefeller Institute for Medical Research, The Journal of Experimental Medicine, The Journal of Biological Chemistry, The Journal of General Physiology* and a series of monographs. These publications are recognized throughout the world as highly scientific and authoritative journals.

From these details it will be seen that the organizers have taken every forethought to render the Institute of great value to the human race. We need something of the kind in Australia.

INTESTINAL PROTOZOA.

The frequent occurrence of dysentery and other intestinal affections among our troops in the East provided unusual opportunities for a detailed study of the pathogenic and non-pathogenic protozoa met with in man. The history of the Gallipoli and Egyptian campaigns and of the advance across Sinai reveals that the clinician is compelled to turn to the protozoologist for information concerning these parasites and their effect on human beings. Under the artificial and strained conditions of war, it may be necessary at times to endeavour to anticipate the most probable infection from the appearances of the stools and from the characters of the symptoms and to institute treatment to confirm this provisional diagnosis. But unless this unscientific and wasteful method is unavoidable, the actual nature of the intestinal affection should be made out in every case of illness, in order to prevent mistakes and consequent delay in attacking the cause of the infection. The medical officers of the Australian Hookworm Campaign are paying careful attention to the intestinal parasites common in Australia. It is already certain that many returned men are harbouring protozoa of various descriptions in their intestines and it is highly probable that a considerable increase of intestinal infections will be discovered among our civil population. In these circumstances a full knowledge of the characters and properties of intestinal protozoa met with in man is eminently desirable. The clinician will be caught unawares unless he is willing to learn from the experience of those who studied this important subject during the war and unless he bears in mind the possibility of intestinal infections arising at home. Captain F. W. O'Connor, R.A.M.C., gives an interesting account of his observations and studies conducted during the time when he acted as protozoologist to the field laboratories attached to the troops engaged in the advance across Sinai.[1] In the first place he has paid much attention to the characters of the stools associated with the various forms of infection. His findings teach us that while the character of the stool may be of value in indicating the probable nature of the infection, the wise practitioner will not rely on this in the determination of a diagnosis. Stools consisting of blood and mucus are in the great majority of cases associated with bacillary dysentery. This form of stool may, however, occur in amoebic dysentery or in Schistosoma infections. In the early stages of bacillary dysentery the stools may consist of almost pure blood, or they may contain watery or tenacious mucus brightly stained with blood. Less commonly the mucus is viscid. Still less frequently there is a complete absence of blood and a striking similarity of the stool to that of cholera. The typical stool of amœbic dysentery is fæcal in character, with streaks and spots of blood-stained mucus. A not uncommon type seen was indistinguishable from that of bacillary dysentery. In *Schistosoma* infections, the stools were of almost pure blood. In the late stages of bacillary or amœbic dysentery various forms of liquid stools were noted. Stools having a yellow ochre colour with streaks or points of mucus without blood are suggestive of infections with *Lamblia intestinalis*. Yellow liquid stools with a highly offensive odour, either with or without blood and mucus, are seen in the late stages of bacillary dysentery. Grey or greyish-brown, liquid stools associated with griping pain and a desire to defæcate were noted in connexion with certain vegetable organisms resembling *Chilomastix* cysts, with blastocysts and with cysts of other less well defined fungi.

It will be seen that a microscopical examination of the stool is essential for the correct diagnosis of dysentery and other intestinal infections. It is useless to carry out this examination unless the specimens are fresh. Dr. O'Connor produces clinical and protozoological evidence to demonstrate the necessity of searching carefully for amœbæ, even when Shiga's or Flexner's bacilli are found. He also calls the attention of the practitioner to the occasional disproportion between the signs and the actual pathological changes. He cites one case in which a private was able and willing to perform heavy duty almost up to the time of his death, which was due to a most extensive ulceration extending from the ileo-caecal valve to the anal canal. He gives an account of the variations in type of *Entamœba histolytica*. The parasite is not always found in the large, free, actively motile phase. Not infrequently abnormalities of the nucleus are

[1] Reprint from *Parasitology*, XI., 3 and 4, October 31, 1919.

seen in the sluggish or non-motile amœbæ. He regards the so-called *tetragena* nucleus of the free forms as due to degenerative changes. Two distinct nuclei have been noted in one actively phagocyting cell. *Entamœba coli* was met with among Indian soldiers, healthy Egyptians and Egyptians who were ill, as well as among white soldiers. Dr. O'Connor has failed to discover any evidence of a pathogenic quality of this protozoon. It may contain as foreign bodies or inclusions a considerable variety of protozoa or vegetable fungi. *Trichomonas hominis* is said to be pathogenic, but Dr. O'Connor was able to trace the symptoms and signs of illness to another organism in two out of three cases in which this parasite was found. *Lamblia intestinalis* is a common intestinal protozoon. In the majority of the persons in whose fæces this parasite was found, there were no signs of inconvenience attributable to it. In three patients a neurasthenia was noted. While it is possible that *Lamblia* may produce some symptoms in debilitated patients, Dr. O'Connor considers it to be a grave mistake to label an illness *Lamblia* dysentery, on account of the mental effect such a diagnosis may have on the patient. *Entamœba nana* is probably non-pathogenic. *Isospora hominis* produces heavy infections at times. Attempts were made to remove the oocysts by means of emetine without avail. In one case the patient suffered from severe symptoms, which may have been due to this parasite, but in another, no symptoms could be traced to it. Dr. O'Connor is uncertain whether or not it should be regarded as pathogenic. An admirable description is given in the paper of some of the vegetable cells met with in human dejecta in association with diarrhœa. Further study is needed before any definite opinions can be expressed concerning the significance of these fungi.

EUSOL IN INFLUENZA.

It is generally admitted that there is no specific remedy in influenza. Many medical practitioners have claimed for particular forms of treatment a more or less curative action, but in all cases it has been found that the results obtained are really attributable to the care given to the patients, to the inherent powers of the patient's organism to overcome a severe infection or to some accidental or unrecognized factor. Before a remedy can be accepted as specific, evidence must be adduced that it is capable of arresting the infecting process and that its action is not capricious. In the absence of a specific remedy, the medical profession pays attention to measures which appear to do good in a large proportion of cases. It is extremely difficult to prove that a drug or method of treatment is of value in a given disease. Long series of cases are required if the statistical method of testing the value of the treatment is to be employed and the control series must be equally large. On the other hand, caution is needed when the claims of value are based on impressions or on observed phenomena following the application of the remedy. In 1915, Lorrain Smith introduced an antiseptic named eusol which is supposed to contain 0.26% of hypochlorous acid and 0.17% of calcium chloride. The instability of the preparation has given surgeons much trouble, but if the solution is properly prepared and carefully titrated, the hypochlorous acid content is found to remain constant for a considerable time. Lorrain Smith applied eusol intravenously in a case of puerperal septicaemia and was gratified to record the recovery of the patient who had seemed to be in a hopeless condition. Favourable reports were published of the use of eusol in gas gangrene, ulcerative endocarditis, pyæmia and other bacterial infections. In 1915, Cordova found that eusol neutralized diphtheria and tetanus toxins both in the culture tube and in the animal body. Injections of eusol protected animals against infection with dysentery bacilli *Staphycococcus pyogenes aureus* and *Bacillus capsulatus*. The prophylactic and therapeutic action of eusol when applied into a vein was questioned by Dakin and others, chiefly because the concentration in the blood immediately after the injection of doses tolerated by human beings and animals was shown to be so low that no bactericidal effect could possibly take place. Moreover, free chlorine cannot exist as such in the blood, and is rapidly converted into inorganic chlorides or organic compounds of various kinds. It must, however, be admitted that evidence is still lacking as to whether the alkaline solution of the hypochlorite is or is not dissociated rapidly in the blood. In these circumstances it is interesting to record that Dr. Arthur Leslie Gregg has endeavoured to test the efficacy of eusol applied intravenously in cases of influenza with severe pulmonary complications.[1] He has used equal volumes of double strength eusol (*i.e.*, 0.5% hypochlorous acid) and double strength physiological saline solution, and of the mixture he has injected from 100 c.cm. to 150 c.cm. per dose into a vein at the bend of the elbow. The injections were usually carried out at about 10 o'clock in the evening. The majority of the patients slept quietly after the injection. Very few exhibited any untoward signs. One sweated profusely and four others had rigors and then sweated. One patient vomited during the administration and another passed some very dark urine on the following morning. This patient had previously had albuminuria and other signs of nephritis; the eusol injection did not exert any deleterious effect on the nephritis. Dr. Gregg maintains that the death-rate was considerably diminished. Only 49 injections were given and, as he does not supply any further figures, much reliance cannot be placed on this statement. He records a clinical improvement in almost every case. This was even noticed in patients with extreme toxæmic cyanosis, patients for whom it appeared that nothing could be done. The pulse and respiration were unaltered at first, but on the morning following the injection the patient looked brighter, the restlessness had disappeared and there was an unmistakable change in the general condition. The treatment was given to some patients in an apparently moribund condition. Dr. Gregg instances the cases of some of the patients as evidence of the power of eusol in contributing to an unexpected recovery. His series is too small to be of real value and the absence of figures is unfortunate. On the other hand his claim that eusol apparently reduces fever and lessens the toxæmia almost dramatically, should stimulate others to test the value of this treatment in this uncanny disease.

[1] *The Dublin Journal of Medical Science*, February, 1920.

Abstracts from Current Medical Literature.

OPHTHALMOLOGY.

(150) Lethargic Encephalitis.

Hiram Woods publishes the details of seven cases of *encephalitis lethargica*, with special reference to the ocular symptoms (*Archives of Ophthalm.*, November, 1919). It first appeared in Vienna in 1916-17 and was later described in Paris by Netter and in England by Harris and Hall. The belief that it was caused by the bacillus of botulinus from contaminated food has been abandoned. The symptoms are insidious onset, drowsiness, with or without headache, ophthalmoplegia of various extent, usually extrinsic, paralysis of the facial nerves, of speech and of deglutition, general muscular tremors, nystagmoid movements and failure of accommodation. The mortality is about 50%. The pathology is unknown. Case I.—A boy, 13 years; exposure to influenza and diphtheria, lethargy, diplopia due to paralysis of the inferior recti, anisocoria, cycloplegia, ptosis, nystagmus and optic neuritis. Four months later he still had defective inferior recti and accommodation with normal central vision. Case 2.—A man, 29; previous influenza, lethargy, "jerking of eyes and difficulty in locating objects till the eyes get still," facial paralysis. Six weeks later improved. Case 3.—Boy, 14; exposure to influenza, had "cold," headache, lethargy, nystagmus, ptosis. About two months later he was much better. Case 4.—A girl, 19; sudden diplopia and left internal squint; lethargy for two weeks. She recovered in 11 weeks. Case 5.—A boy, 19; "cold" followed by fever, lassitude and stupor for nearly a month; left and right facial paralysis, paralysis of accommodation on the left side, periods of improvement and relapse; final recovery. Case 6.—A woman, 65; left abducens paralysis and dilated and feebly-acting pupils; stupor for two months. Diagnosis doubtful. Case 7.—A man, 27; right facial neralgia, right ptosis, paralysis of the right internus, right inferior rectus and left externus; no lethargy. Diagnosis doubtful. Death from respiratory paralysis. In cases showing ocular symptoms the disease is a polio-encephalitis inferior, the nystagmoid movements being due to lesions involving the transverse fibres connecting the ocular nuclei. The lethargy may be explained by the low grade of inflammation about the brain stem cutting off afferent impulses to the cerebrum.

(151) Perforating Wounds of the Eye.

George Maxted has analysed a series of 106 cases of perforating injuries, treated at the 2nd London General Hospital; gross injuries which needed immediate enucleation were not included (*British Journ. Ophthalm.*, January, 1920). In 24 cases foreign bodies were removed from the globe, some in France with a Haab giant magnet and some in London with the ring magnet. Of these, four eyes were subsequently excised; six regained useful vision and fourteen remained blind but quiet. In 22 of the remaining 32 eyes a foreign body was detected by means of X-rays. Of these, 9 were excised, 9 left with blind but quiet eyes and 3 had useful vision. The seat of perforation was corneal in 36, giving 39% of results with useful vision. It was limbal in 37, with only 11% of good results; scleral in 28, with 25% of good results. The lens was injured in 44 cases and at the time of writing only in 7% had useful vision been regained. Explosion of shell was responsible for 67 of the cases and accidental injuries for 19. Only one case of sympathetic ophthalmia occurred. This was in a boy of 19 with a wound in the ciliary region and prolapse of the iris. The splinter passed through into the orbit. About the 47th day the other eye became infected.

(152) Scrofulous Inflammations of the Eye.

By scrofula L. K. Wolff means a particular form of tuberculosis, *viz.*, of the system of the lymphatic glands. He deals largely with phlyctenular disease (*British Journ. Ophthalm.*, February, 1920). Phlyctenules are the result of the absorption of tuberculous poison from tubercular lymphatic glands. His theory is that the patient has had a tuberculous process in his eye before, which has healed, but the eye becomes hypersensitive to tuberculous poison. Treatment consists in removing the tuberculous foci. Removal of the glands by operation is not always practicable, but in cases where this was done, the effect was good. But excellent results can be obtained by treating the glands with X-rays. The author advocates this course. The rôle of the staphylococci is secondary, but they can intensify ulcers of the cornea and conjunctiva and must be considered in treatment. Silver fluorescein ointment (5%) was rubbed into the conjunctival sac every hour in obstinate cases. The injection of tuberculin is of doubtful value.

(153) Ophthalmoscopic War Injuries.

Ed. E. Maxey has endeavoured to formulate the studies by Lagrange on intra-ocular injuries by the following "laws" (*North-West Medicine*, November, 1919). First Law: Injury to the inner coats of the eye may be caused by commotion of the air from the explosion of a shell at some distance, *e.g.*, luxation of the lens, traumatic cataract, choroidal rupture at the posterior pole. Second Law: Injury to the orbit by traumatism of the frontal region and radiating fracture of the orbital vault, usually involves the optic foramen or sphenoidal fissure and causes lesions of the sensory, motor and optic nerves. Third Law: Injury to the facial bony structures, but not involving the orbit, produces lesions of the eye, by concussion, as the macular region. Fourth Law: Injury to the facial bony structures, producing fracture of the orbit, with more or less depression of its walls, without striking the eyeball, produces two types of fundus lesion—macular and para-macular changes by concussion and peripheral fundus lesions at the site nearest the injury to the orbital wall. Fifth Law: When the missile passes through the orbit without direct injury to the eyeball, it produces the same disorders as in group four, with the addition of lesions resulting from laceration of structures of orbital cavity. Very often the optic nerve is cut through, in which event the disc is lacerated as if it had been pulled out. Sixth Law: Mediate or immediate contusion of the eyeball by a missile grazing the globe tangentially produces disorders of the fundus at the site of impact and at the macular region. The area of destruction goes from the posterior pole to the peripheral region, corresponding to the site of impact.

(154) Eye Symptoms and Fractured Base of Skull.

Sydney Stephenson draws attention to certain cases in which the eye symptoms are the only indications present of injury to the skull (*Brit. Journ. Ophthalm.*, November, 1919). Case I.: A cab driver was thrown on to the right side of his head and partially stunned; no bleeding from ear, nose or mouth occurred. Later he developed sub-conjunctival ecchymosis of the lower part of the right eye and lower eyelid. He had continuous headache. He recovered after three weeks' rest. Case II.: A young man sustained a severe blow from a fist upon the right side of his forehead. A fortnight later, seeking advice for aching eyes, the right retina was found to be bespattered with flame-shaped hæmorrhages. Case III.: A lad of seven years, while running, fell upon his forehead. The left eye became convergent; the movement outwards was reduced and the disc was white. The vision of the left eye was perception of light. Case IV.: A boy of 16½ struck his right temple on the corner of a marble table. No loss of consciousness or escape of fluid followed, but a few days later the right eye was turned in and paresis of the external rectus was noted, causing diplopia. More than a year later the position of the eye was corrected by tenotomy and advancement. The author considers that in these four cases there was fracture of the base of the skull. Base fractures are usually extensions downwards of fractures of the vault. A large percentage (82% in Hewett's analysis) of these fissures pass through the middle fossa and often involve the orbit and the optic foramen. The sixth nerve, lying close to the apex of the petrous bone, is particularly liable to injury.

(155) The Ætiology of Uveitis.

E. A. Davis again raises the vexed question of the causation of uveitis and reviews the more modern theories (*Medical Press*, December 17, 1919). The causes may be grouped in three headings: (1) syphilis, tuberculosis, gonorrhœa, influenza and "rheumatism"; (2) perverted metabolism, as in gout, arthritis (so-called uric acid dia-

thesis), diabetes, anæmia and hyperthyroidism; (3) auto-intoxication from focal infections, in the gastro-intestinal tract, naso-pharynx, nasal accessory sinuses, teeth and alveolar processes, tonsils, genito-urinary tract and the skin. Routine examination should be made in all cases. Dwyer's theory of the hyperacidity and hyperalkalinity of the intestinal contents as a factor in eye diseases is passed under review, as is Dunn's theory of hypothyroidism. Treatment is in accordance with the supposed causation.

LARYNGOLOGY AND OTOLOGY.

(156) Adenomata of the Larynx.

Irwin Moore enters into a detailed discussion concerning the possibility of the development of benign adenomata of the larynx, concerning the cases recorded in the literature and concerning a careful investigation by Shaddock of the histology of the true vocal cord (*Journ. of Laryngol., Rhinol. and Otology,* March, 1920). He points out that many authorities have questioned whether this disease ever occurred and that some have even denied its existence. There are 13 cases recorded in literature, but in some there appears to be a doubt as to the correctness of the diagnosis. The author gives a short summary of each of the cases, including an account of the histological appearances in those which were undoubtedly genuine adenomata. In connexion with MacLeod's case, he approached Shaddock who undertook to study and report upon the questions involved. In seven of the 13 tumours the origin was traced to the ventricular band or to the ventricle of Morgagni, one to the epiglottis and five to the true vocal cord. In discussing the pathogenesis of these tumours, the author finds that considerable difference of opinion exists concerning the definition and boundaries of the vocal cord. After summarizing the views of numerous authorities on this subject, he quotes from Shaddock's report. Shaddock finds no difficulty in explaining the adenomata of the ventricular band and of the wall of the ventricle, as these structures include a collection of mucous glands. In dealing with the vocal cord, he finds that its free edge is covered by a closely adherent mucosa furnished with papillæ over its summit and invested with squamous epithelium. Beneath the mucosa there is a compact collection of fibrils of elastic tissue. The deepest fibres of the *thyro-arytænoideus* muscle are inserted into the outer aspect of the elastic fibres. He defines the superior or ventricular limit of the vocal cord as the spot where the columnar epithelium terminates and the squamous epithelium begins. The junction of the sub-glottic squamous epithelium with the true columnar epithelium of the trachea is found at a distance of 7 mm. from the summit of the cord. In regard to the elastic tissue, Shaddock suggests that the area occupied by it should be called the *pars elastica.* This tissue is small in amount and is disposed somewhat in the form of an inverted V, its angle being the thickest part. The thyro-arytænoid muscle lies immediately on its outer side. Superiorly the ventricular limit of the elastic tissue extends to the peripheral limit of the squamous epithelium, while the elastic tissue passes inferiorly into the thin expansion of the lateral portion of the crico-thyroid membrane. From a careful and accurate study of the glandular elements contained in the vocal cord as limited in the manner indicated, it appears that an adenoma may arise in the peripheral portion of the upper moiety of the cord, or it may arise in the lower or infra-glottic face of the cord. An adenoma may also implicate the vocal cord by extension from the adjoining floor of the ventricle.

(157) Catarrhal Deafness.

P. Rice maintains that catarrhal deafness is a very common condition and that the number of persons who are disposed to this form of deafness on exposure to inclement condition is still greater (*Military Surgeon,* February, 1920). He holds that catarrhal deafness usually has its origin in the four following pathological conditions: (*i.*) There is defective nutrition: (*ii.*) there is usually engorgement of the deeper tissues; (*iii.*) there is ankylosis of the ossicular chain; (*iv.*) there is tubal occlusion. He claims that he has obtained excellent results by attending to each of these factors. The defective nutrition has to be treated. If the abdominal organs are not performing their functions properly, a sluggish, general circulation results and the circulation in the tympanum participates in this tendency to stasis. The engorgement of the membranous lining of the Eustachian tube cannot be corrected by inflation until the general circulation is improved. In regard to the local treatment, he claims that by using an instrument, which he calls the "concussomasseur," he is able to effect a stimulation which is followed by hyperæmia and improved tone. The apparatus consists of a magnetic coil in the centre of which is a movable core capable of moving up and down at the rate of about 3,500 excursions a minute. As it descends it strikes a flexible brass diaphragm over an air-tight compartment. The result is a sharp concussion vibration. He points out that the Delstanche masseur and other instruments constructed on similar principles, produce pressure and suction. His apparatus effects a pure concussion. The treatment is carried out by applying the vibrations through the Eustachian catheter for five or six minutes and through the external auditory canal for about two minutes. He repeats this treatment each day. He gives short records of cases treated in this way with excellent results. He claims to have treated about 25 soldiers every day at two camps and in one military hospital during the period of eight months.

(158) Infections of the Nasal Accessory Sinuses.

C. G. Coakley and W. W. Pearson are of opinion that in the surgical treatment of diseased nasal accessory sinuses, especially those of the fronto-ethmoid group, external operations are infrequently required (*Surg., Gynec. and Obstet.,* March, 1920). During the past 11 years, they have dealt with 273 cases of frontal sinus disease in which the diagnosis was confirmed by skiagram. In only seven cases was an external operation needed. They admit that intra-nasal operation does not invariably cure, but satisfactory results can be obtained without the disadvantage of considerable disfigurement. They hold that if the patient be taught to irrigate his own sinus and if pain and discomfort can be removed in this way and the discharge ceases, the patients may be regarded as relatively safe. The indications for external operation are, in their opinion, orbital cellulitis, spontaneous fistula from the rupture of the anterior or inferior wall of the frontal sinus, persistence of symptoms in spite of attempts to establish satisfactory intra-nasal drainage and when the patient cannot give the necessary time for proper intra-nasal treatment. They employ a modification of Killian's operation. When a chronic infection refuses to heal, but gives rise to no constitutional symptoms, they explain the situation to the patient and allow him to elect the method of treatment.

(159) Ionization for Sepsis in the Nose and Ear.

A. R. Friel is of opinion that chronic sepsis of the ear and nose is often rapidly dispelled (*Practitioner,* December, 1919) by ionization of their cavities. A zinc solution (zinc sulphate, 5 grm.; glycerine, 57 c.cm., water, to 1,000 c.cm.) is diluted with an equal quantity of hot water and the cavity to be ionized is washed free from pus with it. Siegel's speculum is useful in aspirating discharge from the middle ear. The cavity is then completely filled, with the solution and the wire conveying the current is dipped into it. The tissues are protected from actual contact with the wire by a vulcanite speculum in the case of the ear and by permitting the metal tube carrying the fluid to the nasal sinuses to convey the current also, it being covered on the outside by rubber tubing or by several coats of insulating varnish. In the case of the nose, the posterior nares must be blocked. This may be effected by introducing a rubber finger-stall into the lumen of the posterior naris and then inflating it. The zinc ion is introduced into the tissues from the solution at the positive electrode. It can be made to penetrate the tissues to any depth required. The current can be conveniently regulated by Leduc's water rheostat. Three milliampères for six minutes is the average dosage for the middle ear, while for the maxillary antrum 15 milliampères for ten minutes, for the front sinus 10 milliampères for ten minutes and for the sphenoidal sinus 7 milliampères for 10 minutes are recommended. If there is no area of caries or necrotic bone, as evidenced by granulations, and no polypi, one irrigation should cause cessation of suppuration in a chronic case within 24 hours and in many cases at once.

British Medical Association News.

SCIENTIFIC.

A meeting of the Queensland Branch was held at the B.M.A. Rooms, Adelaide Street, Brisbane, on April 9, 1920, Sir David Hardie, the President, in the chair.

The President welcomed Captain B. L. Hart on his return from active service.

It was announced that no general meeting of the Branch would be held during the months of August and September, on account of the Congress, which would meet from August 23 to 28, 1920.

Dr. R. Graham Brown showed a girl aged 7½ years who had had a discharging ear since the age of eight months. He had removed some adenoid vegetations from her naso-pharynx and had performed Heath's mastoid operation. She had remained in hospital for seven months, during which time she contracted measles. There was still a discharge from the ear when she left the hospital. She returned to the hospital in the third week of March, when a foul discharge with a peculiar odour was noted. Dr. Brown held that the condition was specific. Her blood was examined and a positive Wassermann reaction was obtained. The patient was given an injectioin of 0.05 gramme of novarseno-benzol and a week later a second injection of 0.2 gramme. The ear had stopped discharging. Dr. Graham Brown also presented the sister of this patient, who was suffering from ozæna. The Wassermann test yielded a negative response. Notwithstanding this, he gave the patient the same doses of novarseno-benzol; a considerable improvement had been noted. He held that a blood test was necessary in all cases of atrophic rhinitis. The drug had been given intra-muscularly with Harrison's creocamph-ream.

Dr. J. J. Power, D.S.O., read a paper on blood transfusion. This paper and the discussion will be published in a subsequent issue of the *Journal*.

Dr. R. Marshall Allan read a paper on the conservative treatment of eclampsia (see page 405).

Dr. A. Graham Butler, D.S.O., thought that there was no object in giving saline solution in eclampsia. They had given up this treatment in cases of chronic renal disease. He suggested that the advantage of giving these injections would be counteracted by the removal of fluid from the body by means of wet packs.

Dr. J. A. Cameron said that it was difficult for the country practitioner to obtain results similar to those spoken of by Dr. Marshall Allan. The mortality among his patients was 25%. He recognized several groups of cases. In the first place, there were those with chronic nephritis and albuminuria. In these cases there were frequently no signs of toxæmia and the pregnancy ended in normal labour. If eclampsia developed, the prognosis was very bad. In the second place, there were severe cases in the early months of pregnancy with symptoms of hyperemesis. The third group consisted of cases signalized by œdema and albuminuria appearing in the later months, together with headache and vomiting. He thought that it was very important to institute preventive treatment in this group. Results equal to those illustrated in Dr. Allan's paper could be obtained. The last group of cases were those in which there was a rapid onset of symptoms. For these cases he advocated Cæsarian section, especially in primaparæ.

Dr. A. S. Roe asked if bacterial infection of the kidneys was recognized as a predisposing cause. He described several cases of albuminuria associated with acute pyelitis and cystitis. In his opinion Cæsarean section was the best treatment for eclampsia.

Dr. D. A. Cameron considered that active measures of treatment were necessary in many cases, especially in primaparæ when the *os* was rigid.

Dr. J. V. Duhig asked if a microscopical examination of the urine was carried out as a routine.

Dr. J. Lockhart Gibson asked Dr. Marshall Allan whether it was the practice in Dublin to induce labour in the event of albuminuric retinitis supervening during pregnancy. When asked to see a patient with albuminuria of pregnancy, he always advised that the uterus be emptied without delay. If the condition were recognized and prompt measures adopted, vision might be restored, otherwise, blindness was likely to result. A typical case exhibited comparatively little papillœdema (swelling of the discs), but many patches of retinal exudation. It should be regarded as an acute condition and treated accordingly, *i.e.*, by the prompt removal of the primary cause.

Dr. R. Graham Brown stated that papillœdema seen in eclampsia was an acute condition and was different from the retinitis of chronic renal disease. The prognosis was very good in acute papillitis of eclampsia, but was grave in the retinitis of chronic renal disease.

Sir David Hardie considered that each case had to be treated individually. If the patient had been under observation and preventive measures of a radical nature had failed, the uterus should be emptied at once. If preventive measures had not been taken or had been carried out in a half-hearted manner, it was wrong to induce labour. He agreed with the toxæmic theory of the causation of eclampsia. He emphasized the need for starvation in every case. He thought that the urine should be examined as a routine measure during the latter months of pregnancy, in order to get a warning of the pending onset of eclampsia.

Dr. Marshall Allan thanked those who had taken part in the interesting discussion on his paper. He stated that a microscopical examination of the urine was carried out as a routine, but he had no notes regarding the presence of organisms. He had refrained from dealing with the subject of toxæmia in the early months of pregnancy, as, according to the Dublin classification, the term eclampsia was reserved for cases in women whose pregnancy was of at least five months' duration. He agreed that patients whose urine contained much albumin and who had œdema, responded better to treatment than others. At present there was a craze for Cæsarean section in all cases. He admitted that this operation was needed at times, but it was not always possible for the average man to perform it. The mortality of patients treated by Cæsarean section was higher than that of patients treated by the conservative method. It was the practice in Dublin to induce labour in all cases of albuminuric retinitis.

MEDICO-POLITICAL.

An extraordinary general meeting of the New South Wales Branch was held on the requisition of thirty members at the B.M.A. Building, 30-34 Elizabeth Street, Sydney, on April 20, 1920, Dr. C. Bickerton Blackburn, O.B.E., the President, in the chair. The meeting was summoned "to protest against the releasement from internment of Dr. Max Herz and to urge that he be deported, as already ordered."

Dr. Blackburn stated that before calling upon Dr. R. Scot Skirving to place a motion before the meeting, he wished to recall briefly the events connected with the question of alien enemy practitioners who had been interned. Early in 1918 the Branch Council had given consideration to the desirability of having the names of alien enemy practitioners who were interned, removed from the Medical Register. The Medical Board was asked to consider the matter and, as a result of representations, the Chief Secretary of the New South Wales Government communicated with the Prime Minister on the subject. A reply was received to the effect that the Prime Minister did not think it desirable that the *War Precautions Act* should be applied for the removal of the names, but that the position would best be met by an amendment of the *Medical Act, 1912 and 1915*, of New South Wales. At that time a Bill to amend the *Medical Act* was under consideration and a clause was drafted, giving the Medical Board powers to remove the names of alien enemy practitioners. The Bill, however, was not proceeded with. A further attempt was made in January, 1919, to induce the Government to take such steps as might be necessary in order that the Medical Board could proceed with the deregistration. On December 5, 1919, an extraordinary general meeting of the New South Wales Branch was held at which resolutions were passed protesting against "those medical practitioners who were interned during the war as being enemy subjects or otherwise dangerous to the community, being allowed to resume practice"; asking the Medical Board to take steps for the removal from the Medical Register of persons registered in virtue of German or Austrian qualifications not resident or practising in New South Wales and of persons registered who had been interned as

alien enemy subjects or otherwise; asking the Federal Government to deport those medical practitioners who had been interned during the war and advising the Federal Government that certain claims made on behalf of these practitioners were not based on any known facts (see *The Medical Journal of Australia*, December 13, 1919, page 517). A reply was received from the Prime Minister's Department to the effect that the views of the New South Wales Branch had been noted and that in regard to the four men specially referred to, the Defence authorities advised that George Baur had been released several years before, that Max Herz was awaiting repatriation, that F. W. Finselbach was on parole pending the settlement of his case and that E. F. Setzke had already been repatriated to Germany at his own request.

On March 9, 1920, it was announced in the public press that Max Herz had refused to board a steamer bound for Java, that the authorities sent him back to the internment camp and that he had been released. Dr. Blackburn presumed that this information was correct and consequently that Dr. Max Herz was able and free to start practice again. There was nothing to prevent him from entering into competition with those men who had answered the country's call and who were now seeking to re-establish themselves in practice after many years' absence abroad. He called on Dr. Scot Skirving to present a series of motions.

Dr. R. Scot Skirving stated that his action might be regarded as ungracious. In December last he had taken a part in the endeavour to deal with the matter that was before them. He had felt very strongly on the subject and at that time had spoken at considerable length. It was an uncomfortable position that he was in, as it would seem that he was the mouthpiece of men desiring to hound this unfortunate individual out of the country. The whole matter was nauseous, but he approached it without fear, because he felt that if they had been right on the former occasion in demanding the repatriation of the interned men, it was equally right and necessary to proceed at the present time. The motions he wished to propose had been drafted with great care and after consultation with several of the most prominent members of the Branch. They had all felt that this matter was too serious a one for the Council to determine of its own initiative. They wished the assent of all the members before any action were taken.

In December he had dealt with all the phases of the question. We would ask the members to excuse him from repeating these unpleasant details. They should try to bring this matter to its legitimate conclusion. He recognized that the medical profession were mere worms and that they had no justification in expecting the confidence of the high members of State, but the high members of State had told them that this man was to have been deported and they now learnt that he had been set free. In all humility he asked for an explanation. If Max Herz had been an alien enemy during the war, if they had found it necessary to intern him for the safety of the Empire and if the Federal authorities arrived at the conclusion that he should be sent back to his own country, it was now evident that some very important reason was actuating these authorities in their present course. It might be that there were high reasons of State; that if Herz were not allowed to stay, it might be regarded as a cause of war. He did not know. He had sought for some apparent explanation for this total change of method, but had found no obvious solution of the riddle. If the Federal Government had a sufficient cause for its apparently inexplicable conduct, let them tell the profession what it was. Otherwise, he claimed that they should carry out their intention of deporting Max Herz. He urged this not in a vindictive spirit and without any personal animus. What they asked was but right and just to the country and but right and just to the medical profession. Dr. Scot Skirving formally moved a series of motions (see below).

Dr. Hugh R. G. Poate seconded the motion. In doing so, he stated that he wished to inform the members of the action taken by the Society of Returned Medical Officers of New South Wales. On December 1, 1919, his Society had communicated with the Prime Minister, protesting against the delay in the repatriation of the alien enemy practitioners who had been interned. They had asked the Prime Minister to give effect to the recommendation of the Aliens Board. A reply had been received dated January 22, 1920, informing the Society that the deportation of Max Herz had been ordered and would be effected as soon as suitable arrangements could be made. On April 12, 1920, a further letter had been sent to the Prime Minister, referring in unmistakable terms of protest to the reported liberation of Max Herz. An acknowledgement of this letter had been received that day. Dr. Poate pointed out that the matter was one which affected the whole profession and not merely those who had served overseas. He thought that it was unnecessary to add any further arguments in favour of the motion which he had pleasure in seconding.

Dr. C. H. E. Lawes called attention to the sixth motion, which was to the effect that the contents of the first five paragraphs should be communicated to the Prime Minister and to those members of the Commonwealth Parliament who had been on active service. He was afraid that if they contented themselves with a letter to the Prime Minister, their efforts would meet with the same response as their previous efforts. Would it not be better for them to send a deputation to the Prime Minister or to the Minister for Defence or to General Sir Granville de L. Ryrie, K.C.M.G., C.B., V.D., who, as Honorary Minister, was acting as Assistant Minister for Defence? He felt that at an interview the strength of their arguments could be more effectively driven home than by a letter. He called attention to the fact that the medical profession was not judging Max Herz. He had already been judged by the Federal Government. They were merely asking that the verdict of the Federal Government should be carried out.

Dr. Lawes thought that if no satisfaction were obtained in this way, other steps might be taken to stimulate public opinion. He therefore suggested that for the present it would be sufficient if the following words were added to motion No. 6:—

> And that a deputation wait on the Prime Minister, the Minister for Defence or the Honorary Minister, to lay the views of the profession before them.

Dr. Scot Skirving and Dr. Poate accepted the suggestion.

Dr. C. Bickerton Blackburn, O.B.E., called attention to motion No. 3 and asked for an expression of opinion concerning its contents. He thought that it was possible that the Federal Government had been induced to change its intentions on account of some absurd claim to unusual skill made on behalf of Max Herz. He thought that it was not unusual for persons, even the highly educated, to think that when an individual had a foreign name, he was likely to be endowed with special skill and special knowledge. The Federal Government should be told that while Max Herz was spending his time in enforced idleness, the men who had served in the Australian Army Medical Corps were gaining an unexampled experience in orthopædic surgery. It should be made quite clear that the war had revolutionized this branch of medical practice. He would like to know whether anyone present had been impressed before the war by Max Herz' special skill as an orthopædic surgeon.

Dr. W. F. Litchfield thought that it should be clearly understood that modern orthopædic surgery was essentially a British development. The name of Sir Robert Jones stood pre-eminent and Australian practitioners had acquired knowledge and skill at the military hospitals organized by him. Max Herz certainly did not possess this special knowledge and skill of orthopædic surgery.

Dr. H. L. Kesteven suggested that if any communication were made in the public press on this subject, it would be advisable to explain the meaning of the word orthopædic. The public, as a rule, did not understand it and he felt sure that if the public were told what this branch of practice comprised, the medical profession would gain its sympathetic support.

The President thanked Dr. Kesteven for the suggestion, which he regarded as a good one. He put the motions to the meeting. They were carried unanimously in the following form:—

> (*i.*) That the New South Wales Branch of the British Medical Association regrets that it is again necessary to convey to the Commonwealth Government an emphatic protest against the continued delay in the repatriation to Germany of Max Herz (*Staatsexamen*, Munich, 1899), who was interned during the war as an alien enemy subject or otherwise dangerous to the community.

(*ii.*) That this continued delay in his repatriation will result in the resumption of medical practice by a German amongst the public of a State well provided with British practitioners, more than half of whom have rendered service overseas and many of whom are expert in the different branches of medicine and surgery.

(*iii.*) That expertness in orthopædic surgery is possessed by many practitioners in different parts of the Commonwealth and these are well trained in the most recent knowledge and technique of this branch of surgery, both in its civil and its military aspects.

(*iv.*) That, if the continued delay in the repatriation of Max Herz is due to the fear that the public of Australia will be adversely affected by the absence of his professional talent or to the assumption that he commands any special knowledge of orthopædic surgery not possessed by the surgeons of Australia or to the supposition that German surgery is better than British, any such fear, assumption or supposition is entirely without foundation.

(*v.*) That, if there are in existence any legitimate grounds or special reason other than those suggested for the continued delay in the repatriation of Max Herz to his fatherland, the New South Wales Branch of the British Medical Association would be glad to be advised of them, so that he may not be the subject of unjust treatment should he ultimately succeed in avoiding repatriation.

(*vi.*) That the foregoing resolutions be forwarded to the Prime Minister of the Commonwealth and to those members of the Commonwealth Parliament who have proceeded overseas on active service; and that a deputation wait upon the Prime Minister, the Minister for Defence or the Honorary Minister to lay the views of the profession before them.

It was further resolved that the Council be requested to urge the Government of New South Wales to introduce legislation at an early date, for the purpose of empowering the Medical Board to remove from the Medical Register the names of alien enemy practitioners who had been interned during the war.

The undermentioned have been elected as members of the New South Wales Branch:—

J. H. B. Brown, Esq., M.B., Ch.M., 1915 (Univ. Sydney), Newcastle Hospital, Newcastle.

E. H. Freidman, Esq., M.B., Ch.M., 1920 (Univ. Sydney), 174 Glenmore Road, Paddington.

G. W. Goddard, Esq., M.B., Ch.M., 1920 (Univ. Sydney), All Saints' Rectory, Petersham.

R. J. Hunter, Esq., M.B., 1916 (Univ. Sydney), c/o. Dr. A. S. Marr, Blayney.

G. H. Pfeiffer, Esq., M.B., Ch.M., 1918 (Univ. Sydney), "Ivanhoe," Berry Road, Greenwich.

R. Power, Esq., M.B., Ch.M., 1914 (Univ. Edin.), 39 Johnstone Street, Annandale.

S. S. Rosebery, Esq., M.B., Ch.B., 1917 (Univ. Edin.) "Mayfield," James Street, Manly.

R. P. Rundle, Esq., M.B., Ch.B., 1917 (Univ. Melb.), Berowra.

C. V. Single, Esq., M.B., 1913 (Univ. Sydney), Moree.

V. R. Wilson, Esq., M.B., Ch.M., 1920 (Univ. Sydney), c/o. St. George District Hospital, Kogarah.

L. May, Esq., M.B., 1914, Ch.M. (Univ. Sydney), F.R.C.S. Edin.), 1919, 152 Pittwater Road, Manly.

H. H. Holland, Esq., M.R.C.S. (Eng.), L.R.C.P. (Lond.), 1907, M.B. B.S. (Lond.), 1908, Cobar.

T. W. van Epen, Esq., M.B., 1913 (Univ. Sydney), Casino.

E. Melikle, Esq., M.B., Ch.M., 1918 (Univ. Sydney), Ingham, North Queensland.

COMPLIMENTARY DINNER TO DR. T. P. DUNHILL, C.M.G..

Seventy-six members of the Victorian Branch of the British Medical Association and of the Melbourne Medical Association assembled at Scott's Hotel, Collins Street, Melbourne, on April 16, 1920, to entertain Dr. T. P. Dunhill, C.M.G., at dinner. The occasion marked the approaching departure of Dr. Dunhill to take up the appointment of Assistant-Director of Surgery at St. Bartholomew's Hospital, London. The chair was taken by the President of the Victorian Branch of the British Medical Association, Mr. G. A. Syme.

After the loyal toast had been honoured, Mr. Syme read apologies for their inability to be present from Sir Harry Allen, Sir Charles Ryan, Sir Henry Maudsley and many others.

In proposing the health of the guest, Mr. Syme expressed the feelings of all present when he said that they had nothing but admiration for Dr. Dunhill as a surgeon, and affection for him as a man.

Dr. Dunhill had come to the medical school quite unknown and not as a public school boy with a future assured. Nevertheless, his instructors at the University were soon able to predict for him a successful career. It was the sterling character of their guest that had made him what he was. When Dr. Dunhill was abroad, British surgeons were much impressed with his personality; tact, geniality and sincere character were his conspicuous attributes and made him just the man for the important position to which he had been appointed at St. Bartholomew's.

Mr. Syme, on behalf of the gathering, tendered hearty congratulations to Dr. Dunhill on his important appointment and expressed the keen regret they all felt at his departure.

Dr. H. Douglas Stephens, President of the Melbourne Medical Association, speaking from personal private knowledge of the guest, paid a sincere tribute to Dr. Dunhill.

Mr. F. D. Bird, President of the newly-formed Melbourne Surgical Association, from his knowledge of Dr. Dunhill as a student at the University, cordially endorsed the remarks of Mr. Syme and Dr. Stephens, and spoke of the well-recognized, high surgical attainments of Dr. Dunhill.

Dr. D. Murray Morton, Senior Honorary Surgeon at St. Vincent's Hospital, recollected the first occasion on which Dr. Dunhill had given an anæsthetic for him at St. Vincent's hospital. He had felt on that first association with Dr. Dunhill, that he had met with a personality. In later years he had proved a loyal colleague and a charming man with whom to work. Dunhill's work on the thyroid was known to the world and it had brought fame on the city of Melbourne, on the Medical School and on St. Vincent's Hospital.

Dr. Stanley Argyle, representing the Returned Medical Officer's Association, spoke of Dr. Dunhill as a friend and a man, whom all held in the highest affection. He had been appointed Consulting Surgeon to that section of the army which had included Dr. Argyle's unit and he had abundantly justified the distinction thus conferred upon him.

Mr. B. T. Zwar, for the Honorary Staff of the Melbourne Hospital, referred to Dr. Dunhill's capacity to succeed in everything to undertook; this was well known in the realm of professional work, but the same ability to excel appeared in Dr. Dunhill's canoeing down the rapids of the Snowy River and his skill in throwing the boomerang.

Dr. R. L. McAdam, as Vice-President of the Melbourne Defence Association and as spokesman for the body of general practitioners, emphasized the fact that no man had more justly earned the high esteem of his colleagues than Dr. Dunhill.

Dr. Dunhill, in acknowledging the toast of his health, said that he valued the presence of so many of his colleagues more than anything that had been said about him. He felt very much their demonstration of kindness and affection toward himself in coming to say farewell. He was constrained to express his great debt of gratitude to his erstwhile teachers at the University. They were men of large ideals, who had taught much more than surgery or medicine.

He was not going to people who could make him happier than he had been in Melbourne; he was not seeking great success, but had felt impelled to go when invited.

He had of late given much consideration to the question of efficient organization of medical and surgical work and felt that surgeons should not have to cover as much ground as they do. There should be more specialization of work; in institutions, head work, neck work, abdominal, urinary and rectal work should go each to its respective department and there should be groups of people in charge. Such a system would lead to increased efficiency and promote the best interest of the patients. More intensive study and more extended research would thereby be facilitated. Progress in medicine and surgery would be advanced and the benefit of the community, which should be their highest interest, would

be served. A man doing eye work, for instance, recognized glaucoma better than a general surgeon and it was not necessary for him (the speaker) to point out the advantages of team work. But team work should go farther and be embodied in a kind of nationalization of medicine—a system which he, for one, believed was certainly coming. If they did not lead in this matter, they should be driven. If the general hospitals were organized on the lines he had indicated, the Government should pick out specialists in the highest departments of surgery and give them the salaries of Supreme Court judges. Each man would be kept for the work for which he was best suited. It behoved the medical profession to work out the details and design them to serve the best interests of the public; men would advance along the lines indicated in personal capacity. As members of the medical profession, they should keep their eyes higher than personal aggrandisement.

In conclusion, Dr. Dunhill stated that it had always been his aim to do the best surgical work of which he was capable, but his highest aim was to win the respect of his colleagues. It was not possible for him to express his gratitude and deep appreciation for the honour they had done him that evening.

Congress Notes.

The Executive Committee of the Australasian Medical Congress has requested us to devote a small amount of space each week to news connected with the Congress. Information concerning the arrangements that are being made, will be published in these columns as promptly as possible, for the convenience of our readers.

The date of the Congress is from August 23 to 28, 1920.

A preliminary reception will probably be held on Saturday, August 21, 1920, in order that the real business of the Congress may begin on the morning of August 23. The work of compiling a provisional programme is now in the hands of a sub-committee. The second official circular will be ready for issue shortly. This circular, like the first, will be distributed with copies of this *Journal*.

A communication has been sent to every Branch of the British Medical Association throughout the Empire announcing that members visiting Australia to attend the Congress will be welcomed as honorary members. Special invitations to attend the Congress have been addressed to a number of eminent medical men. It is hoped that Surgeon-General Gorgas and Sir Ronald Ross, as well as other British authorities on tropical diseases will be present. Mr. C. Mayo has been informed that the Executive Committee would greatly appreciate a visit of a member of his clinic to the Congress.

The Committee is making arrangements for the accommodation of members attending the Congress. A large number of rooms in Brisbane have already been secured and the Committee has pledged itself to a considerable expenditure in anticipation of a large attendance. It is therefore requested that those who intend to visit Brisbane in August for the purpose of attending the Congress, will communicate this fact to the Secretary at an early date and will intimate the amount of accommodation they will require.

The following Standing Orders have reference to the reading of papers in the Sections:—

> (*xvi.*) Notice of all papers, exhibits, etc., to be submitted, should be in the hands of the General Secretary or Secretary of Section two months before the opening of Congress, otherwise they will probably not be included in the published programme of sectional work. Papers may, however, be accepted up to, and even during the meeting of Congress. All notices of papers, exhibits, etc., are subject to acceptance by the Executive Committee, or in emergency by the President of the Section concerned.
>
> (*xviii.*) Short abstracts of papers should be forwarded to the General Secretary or Secretary of Section one month before the opening of Congress and, as far as possible, such abstracts shall be printed for distribution at or before the Congress.

It is hoped that those who are willing to contribute papers, will communicate with the Secretary of the Section concerned or with the Secretary of the Congress in the State in which they reside as soon as possible. It is obviously desirable that the officials of each Section should be enabled to plan as varied and useful a programme as possible. An early intimation of the intention of members to read papers will facilitate this task. It should be remembered that papers to be read at the Congress must be in the hands of the Secretary of the Section before August 1, 1920. There are eleven Sections. We trust that members of the medical profession who have conducted investigational work in any branch of medicine, will remember that the Congress is eminently a suitable place to communicate the results of their observations and views.

THE CHILDREN'S HOSPITAL, MELBOURNE.

The Committee of Management of the Children's Hospital, Carlton, have appointed the following to the various positions rendered vacant by the expiration of the term of office of the present holders.

Honorary Physicians: Dr. A. Jeffreys Wood, Dr. Stewart Ferguson, Dr. H. Hume Turnbull, Dr. A. E. Rowden White.

Honorary Surgeons: Dr. A. Jeffreys Wood, Dr. W. Atkinson Wood, Dr. W. Kent Hughes, Dr. H. Douglas Stephens.

Honorary Physicians to Out-Patients: Dr. R. L. Forsyth, Dr. M. D. Silberberg, Dr. Lionel Hood, Dr. Gerald Weigall, Dr. A. P. Derham.

Honorary Surgeons to Out-Patients: Dr. R. M. Downes, Dr. W. G. Upjohn, Dr. C. W. B. Littlejohn

Honorary Oculist: Dr. Percy S. Webster.

Honorary Radiologist: Dr. Herbert M. Hewlett.

Honorary Dermatologist: Dr. Roland R. Wettenhall.

THE ROYAL PRINCE ALFRED HOSPITAL.

It has been announced that the following have been appointed to the various positions declared vacant on the staff of the Royal Prince Alfred Hospital. In addition, Dr. Joseph Foreman and Dr. H. C. Taylor Young have been appointed Honorary Consulting Gynæcological Surgeons, on retiring from the positions of Honorary Gynæcological Surgeon. Dr. Reuter E. Roth has been appointed Honorary Consulting Medical Officer of the Medical Gymnastics Department on his retirement from the position of the Medical Officer in Charge.

Honorary Physicians: Professor A. E. Mills, Dr. G. E. Rennie, Dr. Sinclair Gillies, Dr. C. Bickerton Blackburn, O.B.E., Dr. E. W. Fairfax.

Honorary Assistant Physicians: Dr. J. I. C. Cosh, Dr. S. A. Smith, Dr. G. G. Sharp, Dr. H. T. C. MacCulloch, Dr. J. MacPherson, Dr. M. C. Lidwill, Dr. P. E. Walton Smith, Dr. H. J. Clayton, Dr. C. G. McDonald.

Honorary Surgeons: Dr. F. P. Sandes, Dr. Charles MacLaurin, Dr. G. H. Abbott, Dr. R. Gordon Craig, Dr. J. Morton.

Honorary Assistant Surgeons: Dr. J. L. McKelvey, Dr. Hugh R. G. Poate, Dr. J. C. Storey, O.B.E., Dr. B. T. Edye.

Honorary Surgeon (for Military Wards): Dr. St. J. W. Dansey.

Honorary Assistant Surgeons (for Military Wards): Dr. C. E. Wassell, D.S.O., Dr. E. M. Fisher, M.C.

Honorary Gynæcological Surgeons: Dr. Fourness Barrington, Dr. Herbert H. Schlink.

Honorary Assistant Gynæcological Surgeons: Dr. R. L. Davies, Dr. F. A. Maguire, D.S.O.

Honorary Director of the Pathological Department: Dr. A. H. Tebbutt, D.S.O.

Honorary Morbid Anatomist: Dr. W. Evans, M.C.

Honorary Bacteriologist: Dr. Elaine M. Little.

Honorary Physician for Diseases of the Skin: Dr. E. H. Molesworth.

Assistant Honorary Physician for Diseases of the Skin: Dr. A. L. Dawson.

Honorary Director of the X-Ray Department: Dr. L. Herschel Harris.

Honorary Ophthalmic Surgeon: Dr. J. C. W. Halliday.
Honorary Assistant Ophthalmic Surgeons: Dr. E. A. Brearley, Dr. R. G. Waddy, Dr. A. H. Rutherford.
Honorary Surgeon for Diseases of the Ear, Throat and Nose: Dr. H. J. Marks.
Honorary Assistant Surgeons for Diseases of the Ear, Throat and Nose: Dr. R. Godsall, Dr. G. R. Halloran, Dr. C. A. Verge, Dr. J. J. Woodburn.
Honorary Director of Medical Gymnastics: Dr. L. G. Teece.
Honorary Assistant Medical Officer for Medical Gymnastics: Dr. D. J. Glissan.
Honorary Medical Officer for Venereal Diseases: Dr. L. E. Ellis.

THE MENTAL HOSPITALS OF NEW SOUTH WALES.

Dr. Eric Sinclair, the Inspector-General of Mental Hospitals of New South Wales, has issued an excellent report for the year 1918.

Statistics.

On December 31, 1917, there were 7,387 insane persons under official cognizance in the State of New South Wales. A year later the number had increased by 241. The number of patients actually in the hospitals on December 31, 1918, was 238 more than at the beginning of the year. Dr. Sinclair points out that this increase is unusually high, the average for the past twenty years being 160.75. The smallest increase was 76 in 1907, while the largest was 249 in 1906. In addition to the 7,026 persons in the mental hospitals, there were 91 in licensed houses, 47 in the Parkside Mental Hospital in South Australia and 464 on leave under the provisions of the *Lunacy Act*. The proportion of certified insane to the general population on the last day of 1918 was one in 253.

During the course of the year 1,458 patients were admitted to the institutions under Dr. Sinclair's care. Of these, 1,163 were admitted for the first time to these hospitals. The number of admissions has increased since 1899 from 796 to 1,458. The increase has been fairly steady, although the level remained almost stationary between 1914 and 1917. Expressed in terms of "occurring insanity," which means the proportion of persons admitted to the hospitals to the total population, the increase in certifiable insanity has been very small during this period. In 1899 it was one in 1,704. Between 1902 and 1905 it varied between one in 1,344 and one in 1,484. Ten years later it was one in 1,466. In 1916 it was one in 1,295, in 1917 it was one in 1,426 and in the year under review it was one in 1,323. It appears that 17 of the patients seen at the Reception House came from overseas and that eight of these were ultimately admitted to the mental hospitals.

Dr. Sinclair follows the usual practice of recording the persons discharged free from symptoms of mental disturbance as persons recovered. Their number was 537. The recovery rate was thus 36.83%, that is, these people stood in numerical proportion to the total number of persons admitted during the year as 36.83 stands to 100. He calls attention to the fact that the 537 patients include "the figures from the Hospital for Imbeciles at Newcastle, from which no recoveries can be expected." In a table appended to the report the column "discharged recovered" opposite this Hospital is left blank. It would appear from the context that eleven persons were involved, but it is not quite clear whether these patients were included in the returns from this Hospital or not. A further 125 patients were discharged improved. The total number of patients discharged on probation or granted leave of absence to the care of their friends was 947. This number, together with 461 patients previously granted leave of absence, was reduced during the course of the year by 387 who were discharged, by 543 who were sent back to the mental hospitals and by 14 who died. There were at the end of the year 464 patients still on leave. The total number of patients transferred from one institution to another was 304.

The modern methods of treating persons with diseases of the mind involves a large modicum of freedom and consequently it is unavoidable that the number of those who escape from their confinement is nowadays considerably larger than it used to be. During the year no less than 51 patients escaped from the mental hospitals. They were immediately followed up and all but four were recaptured. Dr. Sinclair assures the public that these four patients who were still at large when he issued the report, did not belong to a dangerous class of the insane.

Deaths.

During the year 1918 551 insane persons died. This represents 7.8% of the average number resident in the hospitals. The cause of death was a disease of the brain in 214 instances, including 84 of general paralysis of the insane, 47 of inflammatory or other gross lesions of the brain, 36 of maniacal and melancholic exhaustion, 27 of epilepsy and 20 of cerebral hæmorrhage and embolism. Diseases of the cardio-vascular system necessarily accounted for the greater number of deaths, while tuberculosis and old age came next in the list.

Four patients committed suicide and five were accidentally killed. One of the former was absent on leave of absence. One patient hung herself with a sheet hung from a balcony; one set fire to herself with matches given to her by a visitor and another cut his throat with an instrument fashioned from a piece of steel found in the garden. Of the accidental deaths, two resulted from injuries received before admission to hospital and a third was of a patient on leave of absence. One patient was run over by a train while endeavouring to escape and the fifth death was caused by suffocation in bed during an epileptic seizure. There were forty-three minor non-fatal accidents. In all cases of accidental injury, the Medical Superintendent of the hospital makes full inquiries and furnishes a report. Further inquiries are instituted by the Inspector-General, if thought necessary.

Military Patients.

Returned soldiers suffering from nervous and mental affections are treated in No. 13 Australian Auxiliary Hospital (Broughton Hall). In many instances the affection was neurasthenic, so-called "shell shock." When it became apparent that the neurasthenic patients should be separated from those suffering from actual mental disease, it was determined to reserve Broughton Hall for the former and to provide accommodation for the latter in buildings within the grounds of Callan Park Mental Hospital. These buildings are now known as No. 28 Australian Auxiliary Hospital. In addition to the soldiers from the No. 2 Military District, those of the No. 1 Military District suffering from mental affections were also admitted to this hospital. The total number of military patients admitted since the hospital was opened is 260. Of this number, 220 were from New South Wales and 40 were from Queensland. Of the New South Wales patients 152 were discharged recovered and of the Queensland patients 23 were discharged recovered. The number remaining in the hospital on the last day of the year was 85.

Since the opening of Broughton Hall, 1,045 patients have been admitted. The number of those discharged was 941. Many of the convalescent patients were sent to one of the Red Cross homes.

Accommodation.

Accommodation is provided in the nine institutions in New South Wales for 6,088 patients. On December 31, 1918, there were 938 patients more than this number resident in the hospitals. This overcrowding is deplorable and steps should be taken to obviate the necessity for it. The largest hospital is at Parramatta, where there is accommodation for 1,265 patients. At Gladesville there are beds for 952 patients and at Callan Park for 911. The accommodation at the Hospital for Imbeciles at Newcastle is 317.

Mental Ward and Reception House, Darlinghurst.

Patients with incipient mental disorder and those whose affection can be treated without enforced detention, are admitted to the Mental Ward at Darlinghurst. This institution is in reality a psychiatric ward. such as exists in some of the European general hospitals. Dr. Sinclair wisely complains that the general hospitals have not taken advantage of the demonstration given by this ward and have failed to establish similar wards in their own institutions. He enumerates the immense advantages to the patient of a department where they can receive expert treatment for mental ailments without having to be subjected to certification and compulsory detention in a mental hospital. The system of voluntary admission to the ward is gaining in popularity. There

is a further reason why these wards should be established in connexion with the general hospitals. Unfortunately, the majority of medical students learn very little of normal and abnormal psychology and of psychiatry. The function of the psychiatric ward from the educational point of view is so important that it is incredible that this matter has been allowed to rest, in spite of repeated demands from the leading psychiatrists.

On January 1, 1918, there were 16 patients in the Mental Ward. During the year 107 patients were admitted. The number of those discharged was 110, leaving 13 still under treatment on the last day of 1918. There were no deaths.

The Reception Houses at Darlinghurst, Newcastle and Kenmore serve as a filter for patients whose condition demands compulsory detention. The total number of persons dealt with in the three institutions was 1,520. Of this number, 539 were discharged and the remainder were certified and sent to a mental hospital. The Reception House at Kenmore was opened during the course of the year.

The Criminal Insane.

The Hospital for the Criminal Insane is attached to the Mental Hospital at Parramatta. Dr. Sinclair declares that it is unsuitable in many respects, that it is too small and is out of date. During the year the Parramatta Gaol was handed over to the Department for the purpose and these buildings were occupied for the purpose.

Extensive alterations are contemplated in order to render the building suitable as a mental hospital. It is hoped that the necessary funds will be provided within the next year or two for this purpose. Twelve persons were certified as insane while awaiting trial, three were found to be insane by a jury, seven were acquitted on the ground of insanity and fourteen were found to be insane while serving sentences. The offences committed by these persons were as follows; Murder, attempted murder and manslaughter, 11; assaults and the like, 7; sexual offences, 5; offences against property, etc., 11.

Persons who become insane in the gaols are placed in the Observation Wards at Long Bay for treatment and observation. In some instances the recovery is sufficiently complete to justify the return of the person to gaol discipline. In other cases the patients are certified and sent to Parramatta.

Legislation.

Dr. Sinclair refers briefly to a Bill that was being prepared for the purpose of amending the *Lunacy Act* which was defective in many particulars. The proposed Bill will, it is hoped, be submitted to Parliament shortly.

The report contains other information of departmental importance. It is an admirable record of the year's work and reflects credit on the Inspector-General and his staff.

Correspondence.

TONSILLECTOMY IN DIPHTHERIA CARRIERS.

Sir: For over 12 years it has been my practice to enucleate tonsils at the Melbourne Children's Hospital for carriers with universal success, as far as I know. Before Whillis and Pybus's reverse guillotine method, I used to dissect under local anæsthesia. In 1916, I think, two Canadian surgeons contributed to the *British Medical Journal* a short description of same treatment.

Yours, etc.,
W. KENT HUGHES.

22 Collins Street, Melbourne (undated).

THE LABORATORY AND THE CLINIC.

Sir: Professor Osborne in your issue of April 24, 1920, correctly criticizes Mr. Hamilton Russell's rather unfortunately worded remarks quoted in the *Journal* of April 10, 1920, but he might have gone further by pointing out that all present-day surgery rests on the sound basis of asepsis resulting from the laboratory work of Lord Lister. I do not think, however that Mr. Hamilton Russell intended his remarks to be construed as antagonistic to research, but really as a warning against the acceptance of half-formed theories which, often by their extremely fascinating and seductive nature, are taken as proved truths instead of mere hypotheses. The original remarks and the correspondence, however, emphasize the importance of the need of a better relationship and closer association between the laboratory and the clinic, so ably set forth in the sub-leader in the *Journal* of April 10, which should be carefully read by every member of the profession.

For years now as a worker in various laboratories I have been much impressed by the need for a clearer realization of the relative position of clinic and laboratory. There is a tendency nowadays to brand "scientific" that type of work that is the outcome of manipulation of microscope and test tube and to regard it as a thing apart from the work of the rest of the profession.

It should be realized that the profession as a whole should be truly scientific and that the work any particular branch is doing should only differ in the means employed; not in the fundamental method used, which should be always that of the logical, truly-scientific investigator.

Thoughts along such lines have resulted in the proposed institute of pathological research, which is at present being introduced to the profession and public (see advertisement in present issue). The fundamental conception underlying this endeavour, is to provide for continued investigation into the problems associated with every-day disease as met in the wards of a public hospital.

The proposed institute is planned specially to facilitate the co-operation of clinical and laboratory investigation, which will be helped by the close proximity of laboratory and wards, provision of special investigation wards, as at the Johns Hopkins Institute, by the allotting of beds to officers of the institute and reciprocally by the provision of laboratory facilities for the staff of the hospital.

An appeal is being made to the public to provide the means to bring the idea into being and, as soon as sufficient funds are available, work will be commenced by the appointment of a suitable medical laboratory expert or experts and the provision of facilities for work. Space to house the institute fortunately is immediately available, though eventually a special building will be provided on a site already acquired.

This is a very practical proposal, which should interest especially medical men and women, to all of whom the institute will be available and it is to be hoped that the profession who has benefited so much by laboratory work in the past, will themselves contribute freely towards the fund.

Yours, etc.,
C. H. BURTON BRADLEY,
Honorary Secretary.
Advisory Council, Institute of Pathological Research.

Sydney.
April 23, 1920.

Books Received.

A MANUAL ON FOOT CARE AND SHOE FITTING FOR OFFICERS OF THE U.S. NAVY AND U.S. MARINE CORPS, by W. L. Mann, Ph.B., A.M., M.D., and S. A. Folsom, M.D.; 1920. Philadelphia: P. Blakiston's Sons & Company; Crown 8vo., pp. 124, with 58 illustrations.

EDUCATION IN WAR AND PEACE, by Stewart Paton, M.D.; 1920. New York: Paul B. Hoeber; Crown 8vo., pp. 106. Price, $1.50 net.

APHASIA AND ASSOCIATED SPEECH PROBLEMS, by Michael Osnato, M.D., Preface by Frederick Tilney, M.D., Ph.D.; 1920. New York: Paul B. Hoeber; Demy 8vo., pp. 191. Price, $2.50 net.

PHYSICAL RECONSTRUCTION AND ORTHOPEDICS, by Harry Eaton Stewart, M.D., authorized for publication by the Surgeon-General of the U.S. Army; 1920. New York: Paul B. Hoeber; Royal 8vo., pp. 240, with 67 original illustrations and 2 diagrams. Price, $3.75 net.

Proceedings of the Australian Medical Boards.

VICTORIA.

The undermentioned have been registered, under the provisions of Part I. of the *Medical Act, 1915*, as duly qualified medical practitioners:—

Frank Longstaff Apperly, M.R.C.S., Eng., L.R.C.P., Lond., 1915; M.B. *et* Ch.B., Oxford, 1916, Melbourne University.

Alec. Hutcheson Baldwin, M.B., B.S., Melb., 1917, Mollison Street, Kyneton.

Milton Leonard Coutts, M.B., B.S., Melb., 1917, "Echuca," Beanconsfield Parade, St. Kilda.
James Blair Donaldson, L.R.C.P. *et* S., Edin., L.R.F.P.S., Glas., 1913, Linton.
Richard Dennington Fisher, M.R.C.S., Eng., L.R.C.P., Lond., 1916, M.B., B.S., Durham, 1899, Otira Road, Caulfield.
Thomas Sacheverell Greenaway, M.R.C.S., Eng., L.R.C.P., Lond., 1896, Union Bank, Collins Street, Melbourne.
Frank McCallum, M.B., B.S., Melb., 1917, 65 Stanhope Street, Malvern.
Herbert Harold Spencer, M.B. *et* Ch.B., Glas., 1919, c/o. W. G. C. Spencer, Esq., Railway Buildings, Spencer Street, Melbourne.

The following changes of surname have been made:—
Adolphe Frederick Seelenmeyer to Seeley.
Adolphe Henry Seelenmeyer to Seeley.

The names of the late Drs. Thomas Rhodes, Thomas W. Brown and Stanislaus E. A. Z. Woinarski have been removed from the Register.

Medical Appointments.

Dr. W. L. Crowther has been appointed Deputy Quarantine Officer for Hobart, Tasmania.

Dr. R. A. Fox (B.M.A.) has succeeded the late Sir James Fairfax as a Trustee of the National Art Gallery of New South Wales.

Dr. F. H. Thornton (B.M.A.) has been appointed Government Medical Officer at Hillston, New South Wales.

At a meeting of the Melbourne Hospital held on April 20, 1920, the undermentioned resident medical officers were elected for the ensuing year: Drs. C. J. O. Brown, K. D. Fairley, E. W. Chenowith, E. H. Derrick, Winifred Kennan, W. G. Hewitt, A. G. Lee, Hilda E. Kincaid, F. J. Niall, R. E. Allen and E. E. Mackay.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xxv.

University of Sydney: Lecturer in Obstetrics.
Department of Defence: Vacancies for Medical Practitioners.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
VICTORIA. (Hon. Sec., Medical Society Hall, East Melbourne.)	All Friendly Society Lodges (other than the Grand United Order of Oddfellows and the Melbourne Tramways Mutual Benefit Society), Institutes, Medical Dispensaries and other Contract Practice. Australian Prudential Association Proprietary, Limited. Mutual National Provident Club. National Provident Association.
QUEENSLAND. (Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Australian Natives' Association. Brisbane United Friendly Society Institute. Cloncurry Hospital. Stannary Hills Hospital.
SOUTH AUSTRALIA. (Hon. Sec., 3 North Terrace, Adelaide.)	Contract Practice Appointments at Renmark. Contract Practice Appointments in South Australia.
WESTERN AUSTRALIA. (Hon. Sec., 6 Bank of New South Wales Chambers, St. George's Terrace, Perth.)	All Contract Practice Appointments in Western Australia.
NEW SOUTH WALES. (Hon. Sec., 30.-34 Elizabeth Street, Sydney.)	Australian Natives' Association. Balmain United Friendly Societies' Dispensary. Friendly Society Lodges at Casino. Leichhardt and Petersham Dispensary. Manchester Unity Oddfellows' Medical Institute, Elizabeth Street, Sydney. Marrickville United Friendly Societies' Dispensary. Newcastle Collieries—Killingworth, Seaham Nos. 1 and 2, West Wallsend. North Sydney United Friendly Societies. People's Prudential Benefit Society. Phœnix Mutual Provident Society.
NEW ZEALAND: WELLINGTON DIVISION. (Hon. Sec., Wellington.)	Friendly Society Lodges, Wellington, New Zealand.

Diary for the Month.

May 5.—Vic Branch, B.M.A..
May 7.—Q. Branch, B.M.A..
May 11.—Tas. Branch, B.M.A..
May 11.—N.S.W. Branch, B.M.A., Ethics Committee.
May 13.—Vic. Branch, B.M.A., Council; Election of Representative on Representative Body.
May 13.—Q. Branch, B.M.A., Council.
May 14.—N.S.W. Branch, B.M.A., Clinical.
May 14.—S. Aust. Branch, B.M.A., Council.
May 18.—N.S.W. Branch, B.M.A., Executive and Finance Committee.
May 18.—Illawarra Suburbs Med. Assoc. (N.S.W.).
May 19.—W. Aust. Branch, B.M.A..
May 20.—The City Medical Association (Sydney).
May 25.—N.S.W. Branch, B.M.A., Medical Politics Committee; Organization and Science Committee.
May 26.—Vic. Branch, B.M.A., Council.
May 27.—S. Aust. Branch, B.M.A..
May 27.—Q. Branch, B.M.A., Council.
May 28.—N.S.W. Branch, B.M.A..

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.

All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney. (Telephone: City 2645.)